

DIVISION OF CONSUMER ADVOCACY
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## BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

PUBLIC UTILITIES COMMISSION

In the Matter of the Application of	
HAWAIIAN ELECTRIC COMPANY, INC.	Transmittal Nos. 18-01 (Decoupling)
For approval to modify the RBA Rate Adjustment in its Revenue Balancing Account Provision Tariff.	Effective Date: June 1, 2018 )
In the Matter of the Application of	
HAWAI'I ELECTRIC LIGHT COMPANY, INC.	Transmittal Nos. 18-02 (Decoupling)
For approval to modify the RBA Rate Adjustment in its Revenue Balancing Account Provision Tariff.	) Effective Date: June 1, 2018 )
In the Matter of the Application of	)
MAUI ELECTRIC COMPANY, LIMÍTED	Transmittal Nos. 18-03 (Decoupling)
For approval to modify the RBA Rate Adjustment in its Revenue Balancing Account; Provision Tariff.	) Effective Date: June 1, 2018 )

## DIVISION OF CONSUMER ADVOCACY'S STATEMENT OF POSITION

Pursuant to the Hawaii Public Utilities Commission's ("Commission's") Rules of Practice and Procedure, Hawaii Administrative Rules ("HAR") §§ 6-61-61 and 6-61-62, and various decisions, orders, and rulings of the Commission relevant to the annual

decoupling tariff transmittals,<sup>1</sup> the Division of Consumer Advocacy ("Consumer Advocate") offers these comments for the Commission's consideration based upon the review that the Consumer Advocate has been able to conduct thus far of the decoupling rate adjustment filings submitted by Hawaiian Electric Company, Inc. ("Hawaiian Electric"), Hawaii Electric Light Company, Inc. ("Hawaii Electric Light"), and Maui Electric Company, Limited ("Maui Electric") (collectively, the "Hawaiian Electric Companies") on March 29, 2018. As in recent prior years, the Consumer Advocate is again submitting its Statement of Position on a consolidated basis for all three utilities.

This year, the Hawaiian Electric Companies seek to implement RBA Rate Adjustments to recover the following amounts within the June 1, 2018, through May 31, 2019, recovery period:<sup>2</sup>

See, for example, Final Decision And Order And Dissenting Opinion of Leslie H. Kondo, Commissioner, Docket No. 2008-0274 (filed on Aug. 31, 2010) ("2008-0274 Decision and Order"); Decision and Order No. 31908, Docket No. 2013-0141 (filed on Feb. 7, 2014); Order No. 32735, Docket No. 2013-0141 (filed on Mar. 31, 2015); Order No. 34514, Docket No. 2013-0141 (filed on Apr. 27, 2017); Order No. 32866, Tariff Transmittal Nos. 15-03 (Hawaiian Electric Company, Inc. ("Hawaiian Electric")), 15-04 (Hawaii Electric Light Company, Inc. ("Hawaii Electric Light")), and 15-05 (Maui Electric Company, Limited ("Maui Electric")) (Consolidated) (filed on May 28, 2015); Order No. 34503, Tariff Transmittal Nos. 17-02 (Hawaiian Electric), 17-03 (Hawaii Electric Light), and 17-04 (Maui Electric) (Decoupling) (Consolidated) (filed on Apr. 19, 2017).

The RBA tariff states, "The recovery through the RBA Rate Adjustment of a RAM Revenue Adjustment calculated for a calendar year that is also a rate case test year shall terminate on the effective date of tariff rates that implement a Commission approved base revenue level authorized in the Company's test year rate case." Similarly, the RAM tariff states, "The RAM Revenue Adjustment established for a RAM Period calendar year that is also a rate case test year shall terminate on the effective date of tariff rates that are implemented pursuant to a Commission Decision & Order for that test year, unless otherwise specified below." Therefore, the amounts to be recovered by Maui Electric for the RAM component of the RBA rate is expected to be modified by rate orders to be issued later this year in Docket No. 2017-0150 (Order No. 35333 scheduled the interim decision and order for 8/13/2018). The RAM component of the RBA rate for Hawaii Electric Light and Hawaiian Electric were modified by rate orders issued in pending rate case proceedings, Docket Nos. 2015-0170 (Interim Decision and Order No. 34766 and Order No. 35419) and 2016-0328 (Interim Decision and Order No. 35100 and Order No. 35335), respectively.

		Proposed F	RBA Adjust	tment \$000	Existing	Percent
		2018	2017	Increment	Target Rev.	Change
HECO	RBA	54,032	47,442	6,589	658,471	1.0%
	RAM	13,828		13,828	658,471	2.1%
	Total	67,860	47,442	20,417	658,471	3.1%
HELCO	RBA	3,972	3,312	660	163,499	0.4%
	RAM	6,638	3,242	3,396	163,499	2.1%
	Total	10,610	6,554	4,056	163,499	2.5%
MECO	RBA	6,085	2,876	3,209	148,357	2.2%
	RAM	16,429	14,088	2,341	148,357	1.6%
	Total	22,514	16,964	5,550	148,357	3.7%
Note: Excl	udes MEC	O's Embedded	Tax Act Adjus	stments		
					-	
TOTAL	RBA	64,089	53,631	10,458	970,327	1.1%
	RAM	36,894	17,330	19,565	970,327	2.0%
	Total	100,983	70,961	30,023	970,327	3.1%

This table illustrates several points for consideration by the Commission. First, the RBA and Rate Adjustment Mechanism ("RAM") amounts are calculated on a <u>cumulative</u> rather than an incremental basis. In order to determine the "incremental" amounts of change now being proposed, it is necessary to compare the absolute amounts proposed in the Hawaiian Electric Companies' 2018 tariff transmittals to the

cumulative RBA and RAM increases that were approved last year.<sup>3</sup> Second, unlike the prior year, the RBA recovery rates approved for the 2017 tariff transmittals provided insufficient recovery and resulted in a net increase in the all three utilities' RBA balances during the recovery period. This outcome requires an increased recovery rate for the RBA balance for all three of the utilities.<sup>4</sup> When the new RBA recovery amounts are combined with the proposed RAM increases for the three utilities, the Hawaiian Electric Companies have collectively proposed a \$30.0 million, or about 3.1 percent overall incremental increase in recorded adjusted revenue. Notably, these amounts do not include incremental adjustments recommended for Maui Electric's prospective target revenues for Tax Cuts and Jobs Act ("Tax Act") benefits.<sup>5</sup>

Since interim decisions and orders in the recent rate cases filed by Hawaii Electric Light (Docket No. 2015-0170) and Hawaiian Electric (Docket No. 2016-0328) were issued in 2017 with subsequent revisions in 2018 related to the 2017 Tax Act, the cumulative RAM amounts in their 2018 tariff transmittals represent two and one-year changes, respectively.

This change in the RBA balance during 2017 can be observed at Schedule B for each utility. Amounts recovered through Commission-approved RBA rates can be observed in column (f) of Schedule B, while new monthly deferrals for the monthly difference between target and recorded-adjusted revenues can be observed in the "Variance to RBA" amounts in column (e).

In Transmittal 18-03 at page 18, Maui Electric describes its recalculation of 2012 test year revenue requirements applying lower federal tax rates and other Tax Act changes, resulting in a \$5.907 million reduction in target revenues prospectively, as well as a pro-rated \$2.4 million reduction to the RAM for recognition of retained tax savings since January 1, 2018.

This year, the RAM Cap served to constrain the RAM increases that would otherwise be implemented for Hawaiian Electric and Hawaii Electric Light, reducing the RAM amounts by about \$11.1 million and \$62 thousand, respectively.<sup>6</sup> In contrast, the traditionally calculated RAM increase for Maui Electric was below the calculated RAM Cap, such that no Cap constraint was imposed for Maui Electric.<sup>7</sup>

## I. BACKGROUND.

Prior to 2014, RBA rate adjustments were prepared by the Hawaiian Electric Companies in general compliance with the Commission's initial decoupling rulings within 2008-0274 Decision and Order, which provided for implementation of annual RBA rate revisions after review and comment by the Consumer Advocate and Commission. The initial Commission-approved decoupling framework was modified on an interim basis by the Commission's Decision and Order No. 31908, issued in Docket No. 2013-0141 on February 7, 2014. The modifications at that time limited increases in the Rate Base RAM to 90 percent of the calculated amount above the prior year Rate Base RAM and mandated reductions in the RBA interest rate, with interest to be applied

At Hawaiian Electric Schedule A1, the traditionally determined cumulative RAM was reduced from \$24,971,625 to \$13,827,909 by the RAM Cap. Similarly, at Hawaii Electric Light Schedule A1, the traditionally determined cumulative RAM was reduced from \$6,699,547 to \$6,637,843 by the RAM Cap.

At Maui Electric Schedule A1, lines 1 through 6 summarizes the traditionally calculated RAM of \$16,428,671, which is below the RAM Cap of \$18,555,303 summarized at lines 7 through 9.

on a net-of-income taxes basis.<sup>8</sup> Then, with the issuance of Order No. 32735, further modifications to the decoupling regime were implemented, including the insertion of a RAM Cap mechanism, limiting annual increases in target revenues through the RAM mechanism to not exceed the percentage change in Gross Domestic Product Price Index ("GDPPI").

A series of complex implementation issues arising from Order No. 32735 were presented for consideration by the Commission in the 2015 decoupling transmittals. These issues involved how to properly determine and apply the basis for the new RAM Cap, including annualization of depreciation and amortization expense, treatment of the interim 90 percent rate base factor within the basis for the Cap, accounting consistency problems caused by changed clearing account procedures that shifted costs from expense to capital and whether historical or projected GDPPI values should be used to quantify the Cap percentage. Order No. 32866 addressed each of these issues and has been relied upon by the Hawaiian Electric Companies and the Consumer Advocate in preparing and evaluating the pending RBA/RAM filings.

The Hawaiian Electric Companies have calculated and applied the RAM Cap for 2018 at 2.10 percent above prior year 2017 target revenues within the pending tariff

Decision and Order No. 31908, at Ordering paragraph 3, states, "The Commission orders the HECO Companies to revise their decoupling tariffs to provide that the amount of any "Rate Base RAM - Return on Investment Adjustment" ("Rate Base RAM Adjustment") applied to the determination of Target Revenues and the RBA Rate Adjustment in accordance with the existing RAM tariffs shall include the entire effective Rate Base RAM Adjustment from the prior year, plus ninety percent of the amount that the current RAM Period Rate Base RAM Adjustment exceeds the Rate Base RAM Adjustment from the prior year. If the prior year is a rate case test year, the amount of the Rate Base RAM applied to the determination of Target Revenues and the RBA Rate Adjustment shall be ninety percent of the RAM Period Rate Base RAM Adjustment."

transmittals.<sup>9</sup> The use of forecasted rather than historical measures of GDPPI growth for this purpose was approved by the Commission in Order No. 32866 as one of several clarifications of the prior decoupling investigation Order No. 32735.<sup>10</sup> Other adjustments to the RAM Cap basis were approved by the Commission in Order No. 32866 that also impact the determination of the RAM Cap within the utilities' 2018 tariff transmittals. These include annualization of depreciation and amortization based upon actual prior year-end plant in service balances<sup>11</sup> and an adjustment imposed to recognize the expense reduction impact of changes to the Hawaiian Electric Companies' Energy Delivery and Power Supply clearing accounts, in determining the RAM increase and RAM Cap.<sup>12</sup> The Consumer Advocate has verified that the Hawaiian Electric Companies have properly reflected these adjustments in determining the Target Revenues subject to escalation and the RAM Cap for 2018 within Schedule J of the tariff transmittals.<sup>13</sup>

See Schedule J and WP-C-002 where the RAM Cap percentage is documented for each of the Hawaiian Electric Companies, based upon the consensus projected growth in GDPPI published by Blue Chip Economic Indicators. The RAM Cap dollar amount is then applied within Schedule A1 at line 6 (HECO), line 5 (HELCO) and line 7 (MECO).

Order No. 32866, Tariff Transmittal Nos. 15-03 (Hawaiian Electric), 15-04 (Hawaii Electric Light), and 15-05 (Maui Electric) (Consolidated), at 16.

Order No. 32866, Tariff Transmittal Nos. 15-03 (Hawaiian Electric), 15-04 (Hawaii Electric Light), and 15-05 (Maui Electric) (Consolidated), at 7-9. This adjustment was approved after the Commission clarified its intent to use 2014 year-end actual plant in service balances to calculate depreciation and amortization expense in determining the RAM Cap.

<sup>12</sup> Id. at 11-15. The interim rates currently in effect for Hawaiian Electric (Docket No. 2016-0328) and Hawaii Electric Light (Docket No. 2015-0170) include in base rates the changes to the Hawaiian Electric Companies' Energy Delivery and Power Supply clearing accounts implemented in 2014. At Schedule A1, Tariff Transmittal No. 18-03 shows a reduction for these clearing changes for Maui Electric, since no interim order has yet been issued in Docket No. 2017-0150.

See Maui Electric Schedule J. at lines 2 and 6.

The base rates of Hawaii Electric Light Company and Hawaiian Electric Company have been adjusted to account for the revenue requirement impacts resulting from the Tax Cuts and Jobs Act ("Tax Act") with Docket Nos. 2015-0170 and 2016-0328, respectively. The Parties' Stipulated Settlement on Remaining Issues in Docket No. 2016-0328 provided for reductions in interim base rates for both utilities, applying a series of agreed-upon principles to address Tax Act benefits on an accelerated basis for ratepayers.<sup>14</sup> The Settlement noted that, "Maui Electric Company does not have interim rates in place at this time. Therefore, the recognition of Tax Act impacts will be addressed within Maui Electric Company's pending rate case, Docket No. 2017-0150 and as Exogenous Tax Changes within decoupling RAM rate calculations submitted and reviewed for implementation on June 1, 2018."15 Schedule A of the Maui Electric Company decoupling transmittal reflects a downward adjustment of \$2.44 million captioned "2017 Tax Reform Act Adjustment (1/1/18 - 5/31/18)" to account for the estimated Tax Act savings occurring since the beginning of this year that have not been returned to customers, based upon an estimated annualized savings of \$5.907 million prorated for 151/365 days expiring before new RBA rates are made effective.<sup>16</sup> Additionally, changes have been made within the RAM calculation logic to

Docket No. 2016-0328, Parties' Stipulated Settlement on Remaining Issues dated March 5, 2018, Exhibit 1 at 19-23.

<sup>15</sup> *Id.*, page 22.

Transmittal 18-03, Schedule A, Note 3. The Company's proposed adjustment is based upon MECO base rates approved in Docket no. 2011-0092 based upon a 2012 test year, as more fully explained in Transmittal 18-03 at pages 18-19.

incorporate the reduced federal income tax rate and other provisions of the Tax Act that impact RAM revenue requirements.<sup>17</sup>

Two specific adjustments are proposed by the Consumer Advocate to the RAM increases calculated within the Hawaiian Electric Companies' transmittals. The first adjustment would conditionally remove Hawaiian Electric's proposed inclusion of Schofield Generating Station ("SGS") investment that is included as a Major Capital Project addition in Schedule D3, because separate recovery of the SGS revenue requirement is pending before the Commission in Docket No. 2017-0213 through the Major Project Interim Recovery ("MPIR") mechanism. The Company has quantified the RAM reduction impact of removing SGS investments at \$7.2 million, reducing the traditional RAM from \$24.9 million to \$17.7 million. However, because of the \$13.8 million RAM Cap applicable to Hawaiian Electric's RAM in 2018, the removal of this investment does not impact Hawaiian Electric's proposed RBA rate.

The Consumer Advocate's second adjustment revises the amount of Maui .

Electric's proposed Exogenous Tax for Tax Reform Act benefits for the period from

Schedule D employs a lower "Income Tax Factor" in column (f) to reflect the reduced FIT rate, as documented in footnote 1. Schedules D1, D4, F and F1 also reflect the reduced FIT rate under the Tax Act and Schedule E reflects a new "Amortization of ADIT Excess Reg. Liability" credit to return excess ADIT balances resulting from Tax Act revaluation to ratepayers over prescribed amortization periods set for in the Stipulated Settlement Agreement in Docket No. 2016-0328.

The Consumer Advocate's review and the Companies' responses to informal information requests CA-IR-21 and CA-IR-35 revealed small errors in labor cost escalation rates and Accumulated Deferred Income Tax balances that impact Hawaiian Electric's and Hawaii Electric Light's RAM calculations only slightly, and not enough to impact RBA rate calculations due to the RAM Cap that is applicable to the HECO and HELCO RAM calculations in 2018. In the interest of administrative efficiency, these relatively immaterial' adjustments are not described or quantified because they have no impact upon the required RBA rate changes.

HECO response to Consumer Advocate informal CA-IR-33. The traditional RAM of \$24.9 million appears at Schedule A1, line 5.

See Schedule A1 and Schedule J.

January 1, 2018 to May 31, 2018, which does impact the net RAM increase and resulting RBA rate proposed by Maui Electric. These adjustments are described in detail in the Discussion section below.

Two RAM and RBA tariff issues are raised in the Hawaiian Electric Companies' tariff transmittals submitted in 2018. First, with the issuance of interim orders in recent rate cases for Hawaii Electric Light Company and Hawaiian Electric, there was a reset of target revenues and the Companies have proposed conforming revisions to the RBA Rate Adjustment Mechanism tariff to formally allow the determination of RAM Cap target revenues to be based on the results of the Company's most recent *interim or* final rate case decision.<sup>21</sup> Then, in Order No. 35372 issued on March 29, 2018 in Docket No. 2016-0328, the Commission indicated a need to revise the RBA tariff upon approval of the pending decoupling Transmittals to show the Target Revenue currently in effect, as approved in the most recent general rate case. The Consumer Advocate has reviewed and is in agreement with these changes, as more fully discussed under "Tariff Issues" in the Discussion section that follows.

## II. DISCUSSION.

The Hawaiian Electric Companies' calculation of proposed RBA Rate Adjustments in 2018 again includes two elements, the recovery of December 31, 2017 RBA balances and the RAM calculated (or capped) increases to such target revenues. As noted above, proposed rate increases are needed for the RBA recovery component of the overall RBA Rates for all three utilities, because recovery of last year's

See Attachment 1A of Transmittals 18-01, 18-02 and 18-03 containing redline edits to tariffs.

(December 2016) recorded RBA balances was less than new RBA deferrals representing under-recovery of targeted levels of during 2017. As of December 31, 2017, the accumulated RBA balance to be recovered represents a cumulative revenue shortfall of \$54.0 million for Hawaiian Electric, \$4.0 million for Hawaii Electric Light, and \$6.1 million for Maui Electric Company.<sup>22</sup>

With respect to the RAM element of the RBA rate adjustment, for 2018, the Hawaiian Electric Companies have proposed incremental RAM increases of \$13.8 million for Hawaiian Electric, \$3.4 million for Hawaii Electric Light, and \$2.3 million for Maui Electric, driven by calculated increases in the O&M RAM, the Rate Base RAM – Return on Investment and the Depreciation & Amortization RAM Expense for each company, with RAM Cap limitations for Hawaiian Electric and Hawaii Electric Light.<sup>23</sup>

### A. REVIEW OF THE REVENUE BALANCING ACCOUNT.

The revenue balancing account is maintained to accumulate the differences that occur each month between: 1) the target level of base revenues that the utility has been authorized to charge, and 2) the comparable amount of monthly recorded adjusted revenues that were actually earned and charged to customers. The revenue balancing

See Schedule A, at line 3. These amounts include revenue taxes added to the recorded RBA balances at December 31, 2017, as set forth at Schedule B for each utility.

Excludes Maui Electric' Tax Act adjustment at Schedule A, line 7. Because an interim decision and order has not yet been issued to incorporate the 2017 Tax Act savings in base rates for Maui Electric, Schedule A shows a separate line 7 to incorporate the estimated cumulative amount of such savings for the period January 1 through May 31, 2018 into the 2018 RBA rate adjustment calculations.

process is relatively simple to understand in concept and has been succinctly defined within the RBA Tariff.<sup>24</sup>

Unfortunately, considerable complexity is involved in isolating the amount of recorded adjusted base revenue that was actually earned from serving customers each month, so as to exclude each element of non-base revenues and to properly restate for billing adjustments and error corrections impacting current and prior periods. Contributing to this complexity is the necessary inclusion of monthly accounting accruals and reversals for estimated unbilled revenues that are recorded in addition to all of the actual billed-basis revenue transactions and adjustments, because of the requirement within Generally Accepted Accounting Principles for each of the Hawaiian Electric Companies to report financial results on an accrual-basis of accounting.

RBA accounting is limited to base rate revenues. Therefore, it is necessary to isolate and remove the revenues associated with each of the many other revenue tracking mechanisms that have been authorized by the Commission for separate recovery of fuel, purchased power, energy efficiency funding, DSM/IRP, REIP, and other targeted cost recoveries, which result in distinct billed and unbilled revenues each month to derive the residual amounts of "recorded adjusted" base revenues subject to RBA reconciliation. A high-level summary of the many complex elements of this

According to Paragraph A: PURPOSE within the Revenue Balancing Account ("RBA") Provision tariff, "The purpose of the Revenue Balancing Account ("RBA") is to record: 1) the difference between the Hawaiian Electric Company's target revenue and recorded adjusted revenue, and 2) monthly interest applied to the simple average of the beginning and ending month balances in the RBA." In paragraph C, a single sentence defines recorded adjusted revenues, stating, "The recorded adjusted revenue is defined to include the electric sales revenue from authorized base rates, plus revenue from any authorized interim rate increase, plus revenue from any RBA rate adjustment, but excluding revenue for fuel and purchased power expenses, IRP/DSM, any Commission Ordered one-time rate refunds or credits or other surcharges, and adjusted to remove amounts for applicable revenue taxes."

monthly calculation of recorded adjusted revenues can be observed within Schedule B2 of the decoupling template calculation that is submitted by each of the Hawaiian Electric Companies in support of the proposed annual RBA rate adjustment.

Because of this complexity and the potential for significant errors, the Hawaiian Electric Companies have continued to maintain detailed reporting and internal review requirements to help ensure that the complex entries made each month to the RBA account are accurate and complete. Detailed monthly workpaper "Packets" are prepared to document Hawaiian Electric's analysis in support of the RBA entries that are recorded each month, as included within pages 9A, 9A.1, and 9A.2 of the Monthly Financial Report that is submitted to the Commission. These monthly RBA information Packets are submitted to the Consumer Advocate and contain written responses to prescribed information requests that highlight any changes in procedures, billing errors or corrections, or other unusual transactions impacting the RBA entries or balance. Hawaiian Electric has also maintained its internal review and data validation processes to reduce the risk of errors in the recording of revenues that are subject to decoupling reconciliation. In addition, periodic internal audit reviews and annual agreed upon review procedures performed by Hawaiian Electric's external auditor are undertaken to ensure the integrity of RBA accounting procedures of the Hawaiian Electric Companies.

The Consumer Advocate is continuing to review the RBA calculations within Hawaiian Electric's decoupling filing, the monthly informational packets and responses to informal information requests, but at this time has identified no needed adjustments to the December 31, 2017 recorded balances as submitted by the Hawaiian Electric Companies.

## B. REVIEW OF RAM - CONSUMER ADVOCATE PROPOSED ADJUSTMENTS

The Hawaiian Electric Companies' proposed RAM Revenue Adjustment amount is comprised of the O&M RAM, Rate Base RAM – Return on Investment, and the Depreciation and Amortization RAM Expense, as summarized on Schedules A and A1 in the Hawaiian Electric Companies' tariff transmittals. As noted previously, the overall RAM adjustment each year is limited by the RAM Cap approved by the Commission in Order No. 32735, which serves to restrain overall RAM increases to the level of general inflation, as measured by forecasted GDPPI.

Based upon the Consumer Advocate's review to date, there appear to be only two exceptions to the Hawaiian Electric Companies' traditional RAM calculations for 2018 that require Commission attention, as more fully described below.

## 1. Schofield Generating Station.

Hawaiian Electric's RAM Rate Base Adjustment, at Schedule D1 (line 32) and supported by Schedule D3, sets forth a single 2018 Major Project Addition \$141,570,000 for the Schofield Generation Station ("SGS"). This amount for the SGS investment is only included within the end of period rate base and has no impact upon the Depreciation and Amortization RAM Adjustment calculations appearing on Schedule E, because depreciation of SGS would not commence until 2019.

In pending Docket No. 2017-0213, Hawaiian Electric has proposed specific recovery of its SGS investment through the Major Project Interim Recovery ("MPIR") mechanism that was established within Order No. 34514 in Docket No. 2013-0141. The Consumer Advocate's Statement of Position filed on January 17, 2018, in Docket

No. 2017-0213 proposed several revisions to the Company's asserted revenue requirement associated with SGS and stated:

In summary, the Consumer Advocate has concluded that the SGS Project should be found eligible for recovery through the MPIR mechanism and consistent with the established MPIR Guidelines, as explained herein. However, the level of costs proposed by HECO for recovery through the MPIR should be revised downward and the procedures proposed by HECO for implementation of MPIR surcharges through the Revenue Balancing Account ("RBA") mechanism should be modified to ensure that just and reasonable charges result from such surcharges. Additionally, MPIR recovery should not be allowed to commence prior to receipt of signed attestation by senior management that the SGS Project is fully functional and available for dispatch at design capacity and heat rate parameters, along with a detailed reporting of the status of all remaining reliability testing and punch list issues that remain unresolved to achieve Substantial and Final Completion pursuant to contracts.<sup>25</sup>

The Commission has not acted in Docket No. 2017-0213 at the time the instant Statement of Position was prepared.

In order to avoid duplicate recovery of SGS-related revenue requirements, Hawaiian Electric's investment in this facility should not be included within <u>both</u> the RAM mechanism and the MPIR mechanism. To achieve consistency with its position taken in Docket No. 2017-0213, the Consumer Advocate submits that SGS should not be treated as a major project for inclusion in Hawaiian Electric's 2018 RAM calculation. In response to informal CA-IR-33, Hawaiian Electric revised its 2018 decoupling template to quantify the removal of SGS from therein, resulting in a reduction in the traditionally calculated Rate Base RAM – Return on Investment of approximately \$7.2 million, due to the reduction in the SGS major project addition, net of related deferred taxes. A copy of this response is included as <u>Attachment 1</u> to this Statement of Position.

Docket No. 2017-0213, Division of Consumer Advocacy Statement of Position Regarding Hawaiian Electric Company's Proposed Major Project Interim Recovery Mechanism Schofield Generation Station Cost Recovery dated January 17, 2018, at page 6.

Schedule A1 of Hawaiian Electric's 2018 decoupling template calculation reveals that the Company's traditionally calculated Total Adjusted RAM Revenue Adjustment of \$24.97 million exceeds the RAM Cap for 2018 of \$13.83 million by more than \$11 million. Because of this result, removal of the SGS-related revenue requirement from Hawaiian Electric's traditionally calculated RAM does not change the allowed RAM Revenue Adjustment on Schedule A of the template calculations. Thus, removal of SGS from Hawaiian Electric's RAM does not reduce the required RBA rate adjustment.

## 2. Maui Electric Company Exogenous Tax Act Adjustment.

As noted above, both Hawaii Electric Light Company and Hawaiian Electric have received interim base rate orders that recognize the ongoing revenue requirement impacts of the Tax Act. For these two utilities, target revenues in Schedule B1 have been reduced to reflect reduced revenue requirements under the Tax Act and revisions elsewhere within the decoupling template calculations have been made to conform the RAM calculations to the reduced federal income tax rate under the Tax Act, accounting for termination of bonus tax depreciation and the amortization of excess accumulated deferred income tax balances. However, Maui Electric's circumstances are different because recognition of Tax Act impacts is pending final resolution within Docket No. 2017-0150 where an interim order has not been issued. Provision was made within the Parties' Stipulated Settlement on Remaining Issues in Hawaiian Electric's rate case, Docket No. 2016-0328, for Maui Electric to treat the Tax Act as Exogenous Tax Changes in MECO's 2018 decoupling RAM rate calculations submitted for

See for example Hawaiian Electric's Transmittal 18-01 at page 18.

implementation on June 1, 2018.<sup>27</sup> However, the Stipulated Settlement on Remaining Issues did not specify exactly how the decoupling RAM rate calculations would be performed.

Maui Electric proposes to reach back to the Company's last completed base rate case to quantify the incremental impact of the Tax Act. Transmittal 18-03 states:

Because an interim decision and order has not yet been issued, determining the impact of the Tax Act on Maui Electric's currently effective rates would require applying the new corporate tax rates to the 2012 test year revenue requirement. Exhibit 2 of this Transmittal provides the results of operations for the Maui Electric 2012 test year recalculated according to the reduction in the corporate income tax rate from 35% to 21% and the exclusion of the domestic production activities deduction ("DPAD"), as set forth in the Tax Act. The resulting revenue requirement is \$412,980,000. Exhibit 1 of this Transmittal compares the 2012 test year results of operations with the lower Tax Act corporate income tax rate against the Maui Electric final 2012 test year results of operations approved by Order No. 31352 in Docket No. 2011-0092 and shows that Maui Electric's currently effective rates approved in the 2012 test year rate case would decrease by \$5,907,000.<sup>28</sup>

This \$5.9 million annual value for Tax Act impacts is applied at Schedule B1 to reduce the line 1 base rate Approved Rate Level value from \$416.8 million to \$410.9 million for prospective determination of Target Revenues starting June 1, 2018 (after inclusion of cumulative RAM increases). Transmittal 18-03 also states:

In order to provide customers with the Tax Act reductions back to January 1, 2018, Maui Electric used the \$5,907,000 reduction amount to calculate the Daily Revenue Impact and multiplied that amount by 151 days, the number of days from January 1 through May 31, 2018. This method is consistent with the formula used to calculate the Daily Revenue Impact of the Tax Act, as provided in Exhibit 1, page 22, of the *Parties' Stipulated Settlement on Remaining Issues* jointly filed by Hawaiian Electric

Docket No. 2016-0328, Parties' Stipulated Settlement on Remaining Issues dated March 5, 2018, Exhibit 1 at 22-23.

<sup>&</sup>lt;sup>28</sup> Transmittal 18-03 at 18.

and the Consumer Advocate in on March 5, 2018, and as proposed by the Consumer Advocate (and corrected by *Division of Consumer Advocacy's Errata to Simultaneous Testimonies and Exhibits regarding the Amended Statement of Issues Filed on February 14, 2018*, filed on February 27, 2018) in Docket No. 2016-0328. The exception is that the Company used a comparison of revenue requirement runs to calculate the impact of the lower corporate income tax rate and the exclusion of the DPAD, as explained above. The total reduction for that period would be \$2,443,718 which appears on line 7 of Schedule A of Attachment 2.<sup>29</sup>

This daily pro-rate calculation creates the \$2.44 million further adjustment for the "stub" period from January 1 through May 31 of 2018 during which only shareholders have, to date, enjoyed the benefit of Tax Act savings at Maui Electric.

The Consumer Advocate has reviewed the Company's Exhibit 1 calculations and agrees that the \$5.9 million downward adjustment to 2012 test year revenue requirements calculated therein reasonably quantify the impact of the Tax Act federal income tax rate change and loss of the Domestic Production Activities Deduction in that prior test year. Additionally, the Consumer Advocate concurs in the Company's proposal to reduce target revenues on Schedule B1 by this amount prospectively, starting in June of 2018. However, for the "stub" period of January 1 through May 31 of 2018, the Company's proposed daily pro-rate of this amount does not fully quantify the value of the Tax Act during this period. From January 1 through May 31, Maui Electric's approved revenue requirement and target revenues included not only the base rate revenues established in Docket No. 2011-0092, but also included the cumulative RAM revenue increase in effect in those months. The reduced federal income tax rate benefit must also be applied to the RAM element of approved target revenues being recorded by Maui Electric for these periods.

<sup>&</sup>lt;sup>29</sup> Id.

In Docket No. 2011-0092, base rates for Maui Electric were established that provided a return on rate base that totaled \$393.4 million.<sup>30</sup> The equity elements of the return on this rate base are the principal determinant of the \$5.9 million reduction in revenue requirement that is calculated in Maui Electric's Exhibit 1. However, in each year subsequent to the 2012 test year, the Company's target revenues were increased through the decoupling process and the Rate Base RAM Adjustment — Return on Investment. By January of 2018, these Rate Base RAM Adjustments were providing target revenues and a larger taxable income stream, based upon \$47.4 million in additions to average rate base captured in the Company's 2017 decoupling filing.<sup>31</sup> In order to determine the Tax Act savings applicable to January 1 through May 31, 2018, it is necessary to recognize that the Company's approved target revenues and taxable income subject to the lower federal income tax rate are larger because of the growth in rate base earning a return on investment.

In response to informal CA-IR-17, the Company provided calculations requested by the Consumer Advocate to recognize that target revenues have reflected RAM adjustments in the years subsequent to the 2012 test year as illustrated on Schedule B1. These calculations clearly show that the reduction in the pretax rate of return of 1.51 percent, when applied to the cumulative change in rate base being compensated through the 2017 RAM filing in January through June of 2018 (before the 2018 filed RAM changes are effective) would add \$786 thousand to the \$5.9 million Tax Act calculations Maui Electric has improperly limited to the 2012 test year. A copy

See Maui Electric Tariff Transmittal Exhibit 1 "Average Rate Base" for the 2012 test year.

See Schedule D1 of MECO's 2017 decoupling template (Revised 5-22-17) provided in response to Informal CA-IR-4.

of the Company's response to CA-IR-17 is included as <u>Attachment 2</u> to this Statement of Position. It should be noted that in CA-IR-17,<sup>32</sup> Maui Electric quantifies the ongoing Tax Act benefits within the cumulative Rate Base RAM at \$1.22 million, which is additive to the Company's calculated 2012 base rate savings of \$5.9 million. However, this cumulative RAM benefit is included in target revenues only prospectively, starting in June of 2018. This does not eliminate the need to recognize the prior year 2017 cumulative Rate Base RAM revenues that are being realized by the Company during the "stub" period January through May 2018.

Maui Electric proposes that 151/365 days of the \$5.9 million quantified in the 2012 test year, or \$2.44 million, should serve as a reduction to the RBA rate calculated on Schedule A to account for the "stub" period Tax Act savings in 2018. When corrected to account for the cumulative Rate Base growth compensated through RAM increases as of the Company's 2017 decoupling filing, the \$5.9 million value grows to \$6.7 million annually, resulting in an increase in the "stub" period value from \$2.44 million to \$2.77 million.<sup>33</sup> This change reduces the Company's proposed RBA Rate Adjustment to 1.8954 cents per KWH.<sup>34</sup>

The Consumer Advocate has not yet fully reviewed the responses to informal CA-IR-36 and -37, which were received on May 9, 2018.

<sup>\$5.907</sup> million per MECO Exhibit 1, plus \$0.786 million from CA-IR-17 Attachment 1 in column F2 equals \$6.693 million. 151/365 days times this amount is \$2.769 million.

The Total RBA Revenue Adjustment at Schedule A line 8 becomes \$19,744,670 when line 7 is changed to \$(2,768,885).

### C. TARIFF MODIFICATION ISSUES.

Two decoupling tariff modification issues are raised by the Hawaiian Electric Companies in their RBA rate adjustment tariff transmittals this year. They include:

- Insertion of the words "interim or" within the definition of the revenue basis for the RAM Cap, to clarify updating the RAM Revenue Adjustment Cap should occur at the time a new revenue requirement is determined in either an interim or final rate case decision, and
- Inclusion of a table within the RBA tariff showing the computations supporting the Commission-approved level of Annual Target Revenue, as directed by the Commission in Order No. 36372 issued March 29, 2018 in Docket No. 2016-0328.

The Consumer Advocate supports Commission approval of these Company-proposed changes for the reasons described herein.

With respect to including reference to "interim or" final rate orders to administer the RAM Cap, it is appropriate to recognize that in rate case proceedings the input values used to define traditional RAM calculations are comprehensively updated within newly established target revenues. It is therefore essential that the RAM Cap computations employ consistent input values, in order to avoid Cap limitations that may inadvertently reduce revenues from levels approved in a recent interim rate order.

The inclusion of a Target Revenue computation table adds transparency to the RBA accounting process and highlights changes to target revenues when they occur. The Consumer Advocate supports the added transparency and clarity achieved by this disclosure within the tariff.

### D. ADMINISTRATIVE MATTERS.

## 1. On-Cost Clearing Allocation.

With the issuance of interim decisions and orders for HECO (Docket No. 2016-0328, ID&O No. 35100 and Order No. 35335) and HELCO (Docket No. 2015-0170, ID&O No. 34766 and Order No. 35419), the effect of the change in the Energy Delivery and Power Supply On-Cost clearing allocation process has been included in the determination of O&M expense included in base rates. As a result, the RBA/RAM filings for HECO and HELCO no longer require a separate RAM adjustment to ensure that the O&M reduction associated with that change are passed on to ratepayers.

Since an interim decision and order has not yet been issued in the pending MECO rate case, MECO Schedule A1 continues to show an adjustment for the change in on-cost clearings in quantifying the Total Adjusted RAM Revenue Adjustment. Once the change in the on-cost clearing allocation process is included in base rates, this adjustment will no longer be required in future RBA/RAM filings.

## 2. Depreciation Settlement Agreement (Docket No. 2016-0431).

On March 23, 2018, the HECO Companies and the Consumer Advocate filed a Stipulated Settlement Agreement in Docket No. 2016-0431 proposing negotiated depreciation and amortization rates for Commission review and approval. In response to Informal CA-IR-19, the HECO Companies discuss the planned timing of when the once-approved settlement depreciation/amortization rates and the related CIAC amortization would be recognized for RAM purposes:

As stipulated in Docket No. 2016-0431 – Hawaiian Electric Companies and Parties' Depreciation Rates Stipulated Settlement Agreement, page 2, item (6), the Companies and the Consumer Advocated propose to incorporate the new depreciation and amortization rates and revised CIAC amortization period once approved by the Commission, and would coincide with the effective date of the interim or final base rates approved in the subsequent rate case for each Company that incorporates the new depreciation and amortization rate and revised CIAC amortization period in its test year revenue requirement. Subsequent to the implementation in each Company's respective rate case, the new depreciation and amortization rates and revised CIAC amortization period would be applied in Schedules E and G in the next annual decoupling filing following that rate case.

In MECO's pending rate case (Docket No. 2017-0150), the Company filed multiple revenue requirement scenarios one of which recognized and incorporated MECO's <u>proposed</u> depreciation rates in setting base rates.<sup>35</sup> In response to CA-IR-167,<sup>36</sup> MECO provided additional calculations quantifying the impact of the settlement on the amount of depreciation and amortization and related CIAC amortization that would be recorded in 2018, if the Commission approved the Stipulated Settlement Agreement. In MECO's 2018 test year rate case, the Consumer Advocate also sponsored an adjustment to include the effect of the Stipulated Settlement Agreement in the calculation of the change in revenue requirement.<sup>37</sup>

<sup>&</sup>lt;sup>35</sup> See MECO-2509 through MECO-2516 (Docket No. 2017-0150).

See the responses to CA-IR-167 (Docket No. 2017-0150), specifically the supplemental responses designated 4/5/2018 and 4/9/2018.

See Exhibit CA-102, CA Adjustment C-21 and the Consumer Advocate's response to MECO/CA-IR-103. Applying the Stipulated Settlement Agreement depreciation and amortization rates to MECO's 2018 test year rate case would increase the amount of depreciation/amortization expense net of CIAC amortization to be recorded in 2018 and included in the 2018 test year by about \$5.6 million.

In response to Informal CA-IR-20, the HECO Companies did not perform a detailed calculation of the impact of the Commission approval of the Stipulated Settlement Agreement on the resulting net depreciation and amortization expense to be recorded in 2018. However, the response did provide a recap of HECO-S-101 (based on 2015 recorded plant balances) and included amounts for MECO on a comparable basis for informational purposes.<sup>38</sup>

Ref: HECO-S-101	Existing Rates	Settlement Rates	Change
Page 2 – HECO	\$122,296,540	\$122,505,185	\$208,645
Page 8 – HELCO	40,561,345	36,294,804	(4,266,541)
Page 6 – MECO	24,934,272	30,371,623	5,437,351
Totals	\$187,792,157	\$189,171,612	\$1,379,455

The amounts of change presented in the above table do not represent the actual impact the Stipulated Settlement Agreement would have on the amount of change in depreciation and amortization expense that each Company would record in 2018 if approved by the Commission. But, as noted by the HECO Companies in response to Informal CA-IR-20, "[t]he Company believes the results are indicative of the direction and magnitude of the impact of comparing the Existing vs. Settlement Agreement rates as Maui Electric reflected similar results using recorded December 31, 2017 plant balances [reference omitted]."

Assuming the change amounts depicted in the above table are reasonably representative of the change resulting from application of the settlement depreciation and amortization rates to actual plant balances at year-end 2017, each of the HECO Companies will be uniquely impacted by implementation of the settlement. HECO

The table provided in response to Informal CA-IR-20 has been slightly modified and expanded to include total and net change amounts for informational purposes.

would experience a slight increase in depreciation expense. HELCO would realize a significant reduction in depreciation expense, not quite offsetting the significant increase to MECO. If depreciation changes in these approximate amounts were implemented for RAM purposes in 2018: HECO's RAM Revenue Adjustment would remain limited by the RAM Cap; HELCO's RAM Revenue Adjustment would fall below the RAM Cap, which is currently a limiting factor; and MECO's RAM Revenue Adjustment would rise above the RAM Cap, which is currently not a limiting factor.

## 3. Customer Benefit Adjustments.

In quantifying the O&M RAM Adjustment on Schedule C (Tariff Transmittal 18-01), HECO Schedule C1 provided a breakdown O&M expense between labor and non-labor components. Footnotes 2, 2b and 3 of Schedule C1 identify Customer Benefit Adjustments as reducing expense by \$10,023,000 and refer to Commission Order No. 35335 for additional support. A review of Order No. 35335 and the related Parties' Stipulated Settlement on Remaining Issues filed March 5, 2018, reveals that the \$10,023,000 amount is comprised of two items:

Customer Benefit	Gross-Up
Adjustment	(1.09751)
\$5,467	\$6,000
4,556	5,000
\$10,023	\$11,000
	Adjustment \$5,467 4,556

HECO Schedule C1 shows these Customer Benefit Adjustments as reductions to non-labor O&M expense for purposes of applying the inflation indices on Schedule C. In response to Informal CA-IR-34, the HECO Companies explained that the Customer Benefit Adjustments were treated "as a reduction to non-labor O&M because the adjustment is not linked to any specific O&M component and non-labor O&M is the single largest component of O&M." Because neither of the Customer Benefit Adjustments shown in the table above are clearly identifiable as being labor-related costs, the Consumer Advocate concurs with Hawaiian Electric's proposed treatment.

## 4. LANAI CHP (MECO Transmittal No. 17-04).

Referring to 2017 RBA/RAM Transmittal No. 17-04, Maui Electric filed an original and a revised RBA Rate Adjustment dated March 31, 2017, and May 5, 2017, respectively. In its responsive Statement of Position, the Consumer Advocate explained that both the original and revised MECO transmittals included in the beginning and end of period RAM Rate Base (Schedule D1 at Note 1) amounts for the Lanai CHP within net plant. The Consumer Advocate also explained (referring to Informal CA-IR-32) that the Lanai CHP addition to rate base was included in the Company's 2012 test year rate case (Docket No. 2011-0092)<sup>39</sup> allowing rate base recognition of the Lanai CHP system plant investment of \$3.5 million less accumulated depreciation, rather than the cost of the direct financing lease treatment required for public financial reporting.

The Lanai CHP issue first arose in MECO's 2010 test year rate case (Docket No. 2009-0163) and was resolved in the settlement agreement in that case (filed June 21, 2010).

In Transmittal No. 17-04 at MECO-WP-D1-002, page 2, Maui Electric explained that the CHP system incurred extensive/irreparable damage due to fire on March 6, 2015. Although the CHP system was removed from service at that time, the Consumer Advocate's Statement of Position stated that Maui Electric included the net book value of the investment in rate base and expects the unit to return to service in November 2017. In that Statement of Position, the Consumer Advocate recommended the removal of the net investment and related depreciation expense from the 2017 RBA/RAM filing. In the pending Maui Electric rate case, MECO-1214 describes the differences in CHP accounting for financial reporting and ratemaking purposes, including the damage caused by the fire on March 6, 2015, and states that the CHP unit was returned to service on September 5, 2017.40

Since the Lanai CHP has returned to service and accumulated depreciation balance set forth in Note A of Schedule D1 includes depreciation for all months since the CHP unit was initially placed in service, the Consumer Advocate does not propose any adjustment at this time.<sup>41</sup>

Also see Maui Electric responses to CA-IR-397 and CA-IR-398 (Docket No. 2017-0150) regarding the CHP unit.

In Transmittal No. 17-04, the Consumer Advocate proposed removing the CHP unit from rate base and observed that Maui Electric had recorded no depreciation since the unit was taken out of service in March 2015. These issues of concern to the Consumer Advocate regarding the Lanai CHP unit, in the context of Transmittal No. 17-04, are no longer applicable. The CHP was returned to service in 2017 and the accumulated depreciation reserve, as presented on Schedule D1 and supported by MECO-WP-D1-002, reflects depreciation for all months since the was initially placed in service.

## III. CONCLUSIONS AND RECOMMENDATIONS.

For the reasons set forth herein, the Consumer Advocate recommends that the calculated adjustment to revenues proposed by the Hawaiian Electric Companies in its Transmittal Nos. 18-01, 18-02, and 18-03 should be approved, subject to the modification described herein applied to the revised RAM calculations of Maui Electric.

DATED: Honolulu, Hawaii, May 11, 2018.

Respectfully submitted,

DEAN NISHINA
Executive Director

**DIVISION OF CONSUMER ADVOCACY** 

Attachment 1 Trans. Nos. 18-01, 18-02, and 18-03 PAGE 1 OF 28

> INFORMAL CA-IR-33 2018 RBA RATE FILING

**INFORMAL CA-IR-33** 

Ref: Schedule D3 (Schofield Generation Station). What dollar impact did inclusion of Schofield Generation Station have upon Hawaiian Electric's traditionally calculated Rate Base RAM and Depreciation/Amortization RAM? Please provide calculations supportive of your response.

Hawaiian Electric Companies' Response:

See Attachment 1 of this response for the 2018 Decoupling Template revised for the exclusion of the Schofield Generation Station as a 2018 Major Project plant addition. Changes to the respective schedules and cells have been highlighted in yellow.

The Rate Base RAM – Return on Investment decreased by \$7.2 million due to the reduction in major project additions and related deferred taxes. There was no change to Depreciation & Amortization RAM Expense because depreciation expense is recorded beginning in the year after an asset is placed in service, therefore, depreciation expense is zero in year 1 (i.e., 2018).

## HAWAIIAN ELECTRIC COMPANY, INC. DECOUPLING CALCULATION WORKBOOK DETERMINATION OF 2018 REVENUE BALANCING ACCOUNT RATE ADJUSTMENT

Line No.	Description		Reference		Amount	Rate Amount		
	(a)		(b)		(c)		(d)	
	RECONCILIATION OF RBA BALANCE:							
1	RBA Prior calendar year-end balance	8	Schedule B	\$	49,231,536			
2	Revenue Tax Factor	8	Schedule C		1.0975			
3	Revenue for RBA Balance					\$ -	54,031,611	
	RATE ADJUSTMENT MECHANISM 'RAM" AMOUNT:							
4	Total RAM Revenue Adjustment Allowed (Note 2)	s	chedule A1			\$	13,827,909	
5	EARNINGS SHARING REVENUE CREDITS - 2018 ROE:	5	Schedule H			\$	•	
6	PUC-ORDERED MAJOR OR BASELINE CAPITAL PROJECTS CREDITS:		Schedule 1			\$	-	
7	TOTAL RBA REVENUE ADJUSTMENT	S	Sum Col. (d)			\$	67,859,520	
8	GWH SALES VOLUME ESTIMATE JUNE 2018 - MAY 2019	HE	CO-WP-A-001				6,556.200	
9	RBA RATE ADJUSTMENT - cents per kWh		Note (1)				1.0350	
10	MONTHLY BILL IMPACT @ 600 KWH					\$	6.21	
	MONTHLY BILL IMPACT @ 500 KWH					\$	5.18	
	Note (1): 2018 RBA Rate Adjustment Breakdown		Col. (d)		te Adjustment ents per kWh	F	Percentage Share	
	RBA Balance	\$	54,031,611	<u>~</u>	0.82412999		79.6227%	
	RAM Amount	\$	13,827,909		0.21091347		20.3773%	
	Earnings Sharing Revenue Credits	\$	-		0.00000000		0.0000%	
	Major or Baseline Capital Projects Credits	\$	-		0.00000000		0.0000%	
		\$	67,859,520		1.03504346		100.0000%	

Note (2): Total RAM Revenue Adjustment Allowed is the sum of the RAM Cap + Exceptional and Other Projects. See Order No. 32735, filed March 31, 2015, paragraph 107, page 94, which states that the Total RAM Revenue Adjustment is to be comprised of the RAM Cap plus recovery of Exceptional And Other Matters.

# HAWAIIAN ELECTRIC COMPANY, INC. DECOUPLING CALCULATION WORKBOOK DETERMINATION OF TOTAL RAM REVENUE ADJUSTMENT ALLOWED

Line No.	Description	Reference	Amount	
	(a)	(b)	(c)	_
	RAM REVENUE ADJUSTMENT DETERMINED ACCORDING	TO EXISTING TARIFFS AND PRO	CEDURES	
1	O&M RAM	Schedule C	\$ 4,358,860	0
2	Rate Base RAM - Return on Investment	Schedule D	\$ 5,107,080	9
3	Depreciation & Amortization RAM Expense	Schedule E	\$ 8,231,502	2
4	Total RAM Revenue Adjustment		\$ 17,697,450	0
5	Total Adjusted RAM Revenue Adjustment		\$ 17,697,450	D
	RAM REVENUE ADJUSTMENT CAP			
6	RAM Cap for 2018 RAM Revenue Adjustment	Schedule J	\$ 13,827,909	9
7	Plus: Exceptional and Other Matters	Schedule K	<u> </u>	
8	2018 Cap - Total RAM Revenue Adjustment (Note 2)		\$ 13,827,909	9
9	Total RAM Revenue Adjustment Allowed (Note 1)	Lesser of Line 6 or Line 9	\$ 13,827,909 To Sch	_
Note 1	RAM Revenue Adjustment Allowed: See Order No. 32735, filed March 31, 2015, paragraph 106, p *The RAM Revenue Adjustment to be applied to determine ef Revenue Adjustment determined according to existing tariffs a ("RAM Cap) to be calculated as specified."	fective Target Revenues will be the le		
Note 2	Total RAM Cap: See Order No. 32735, filed March 31, 2015, paragraph 110, p *The RAM Cap will apply to the entire RAM Revenue Adjustm Major Capital Projects and Baseline Projects), and the Depres	ent including the O&M RAM, flate Ba	ase RAM (including	

## HAWAIIAN ELECTRIC COMPANY, INC. DECOUPLING CALCULATION WORKBOOK SUMMARY OF ACCUMULATED REVENUE BALANCING ACCOUNT

Line No.		Month (a)		Beginning Balance (b)		Target Revenues (c)	<u>-</u>	Recorded Adjusted Revenue (d)		/ariance to RBA (e)		ijustment for Prior Year BA recovery (f)	_A	dj <u>ustment</u> (g)	_	ax-effected Balances Subject to Interest (h)		terest at 75%/year (I)		Ending Balance (j)
	Month	y HBA Halanci	e and	Activity (Month	ŊΡί	JC Rpt., Pg. 9A	1)													
1	2016	December	\$	42,607,398	\$	48,957,962	\$	44,527,809	\$	4,430,153	\$	(3,844,438)	\$	(4,878)	\$	26,204,786	\$	38,215	\$	43,226,450
2				djustment - Not	e (1)	)													\$	1,162
3		REVISED 20	016 De	ecember															\$	43,227,612
5	2017	January	s	43,226,450		48.009.623		43,237,808	•	4.771.815	s	(3.587.935)	\$	1,162	\$	26,769,364	s	39,039	\$	44,450,531
6		February	Š	44,450,531	Š	43,030,848	\$	40,425,191	\$	2,605,657	S	(3,275,174)	š	7,102	Š		Š	39,303	Š	43,820,317
ž		March	Š	43,820,317	Š	48,009,623	\$	45,789,648	Š		Š	(3,750,510)	š	(9,468)	•	26.296.546	š	38,349	š	42,318,663
ė		April	Š	42.318.663	Š	46,468,574	š	44,302,813	\$	2,165,761	Š	(3,677,669)	š	8,295	š		š	37.035	Š	40,852,085
9		May	Š	40.852.085	Š	50,024,842	Š	46,273,239	Š	3,751,603	5	(3,857,908)	Š	7.049	Š		Š	36.354	Š	40.789.183
10		June	ŝ	40.789.183	Š	51,184,359	Š	46,469,888	Š	4,714,471	Š	(3,600,794)	ŝ	-	S	25,258,284	Š	36,835	Š	41,939,695
11		July	\$	41,939,695	\$	52,997,265	Š	48,512,767	\$	4,484,498	S	(3,839,911)	\$	-	\$	25,817,849	\$	37.651	\$	42,621,933
12		August	\$	42.621.933	\$	54.628.079	s	50,950,611	\$	3,678,268	\$	(3,964,587)	\$	-	\$	25,950,283	\$	37,844	\$	42,373,458
13		September	\$	42,373,458	\$	52,453,393	\$	47,591,388	\$	4,862,005	5	(3,809,426)	\$	(125)	\$	26,207,379	\$	38,219	Š	43,464,131
14		October	\$	43,464,131	\$	53,057,695	\$	48,307,664	S	4,750,031	\$	(3,827,297)	\$		\$	26,834,087	\$	39,133	\$	44,425,998
15		Novernber	\$	44,425,998	\$	49,915,326	\$	44,634,552	\$	5,280,774	\$	(3,440,844)	\$	-	\$	27,701,849	\$	40,399	\$	46,306,327
16		December	\$	46,306,327	\$	49,915,326	\$	43,730,598	\$	6,184,728	\$	(3,302,057)	\$	-	S	29,169,047	\$	42,538	<b>F\$</b>	49,231,536
17					\$	599,695,753	\$	550,226,167	\$	49,469,586	\$	(43,934,112)	5	6,913			\$_	462,699		To Sch A
18					_		_													
19	2018	January	\$		\$	48,948,443	\$		s	_	5	-	\$	-	\$	-	\$	-	\$	-
20		February	\$	-	\$	45,953,154	\$		\$	-	\$	-	\$	-	\$	-	\$	-	\$	•
21		March	\$	-	\$	51,603,222	\$		\$	-	\$	-	\$	-	\$		\$	-	\$	
22		April	\$	-	\$`	49,061,587	\$		5	-	\$		\$	-	\$	-	\$	-	\$	-
23		May	\$	-	5	50,396,658	\$	~	\$	-	5	-	\$	-	\$	-	\$	-	\$	•
24		June	\$	-	.\$	49,434,694	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
25		July	\$	-	\$	53,293,908	\$	•	\$	-	\$		S	-	\$	-	\$	-	\$	-
26		August	\$	-	\$	54,764,085	\$	-	\$	-	\$	-	\$		\$	-	\$	-	\$	-
27		September	\$	-	\$	52,987,621	\$		\$	-	\$	-	\$		\$		\$	•	\$	-
28		October	\$	-	\$	54,151,511	\$	-	\$	-	\$	•	5	-	\$	-	\$	•	\$	-
29		November	\$	-	\$	50,598,584	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
30		December	\$	-	\$	50,721,099	\$	•	\$	•	\$	•	\$	-	\$	-	\$	-	\$	-
	Source	s of Data:			*	611,914,566 Sch B1		Sch B2	C	Cols (c)-(d)		Note (2)	ı	Note (1)		cols (b)+(g)+ (e)+(f))/2)/(l)			С	ols (b)+(e)+ (f)+(g)+(i)

Composite Federal & State Income Tax Rate Income Tax Factor (1 / 1-tex rale) 38.91% (k) 1.636929 (l)

### Note (1): Adjustment Summary:

			RBA	A True-up					
		Workpaper	Ad	justment	RBA	Interest		Total	
Year	Month	Reference	Sch E	32, Line 19	_ Adju	stments	Adj	ustment _	Adjustment Description
2017	January	HECO-WP-B-002	\$	1,162	\$		\$	1,162	Prior period adjustments
2017	March	HECO-WP-B-003	\$	(9,468)	\$	-	\$	(9,468)	Prior period adjustments
2017	April	HECO-WP-B-004	\$	8,295	\$		\$	8,295	Prior period adjustments
2017	May	HECO-WP-B-005	\$	7,049	\$	-	\$	7,049	Prior period adjustments
2017	September	•	\$	(125)	\$		\$	(125)	Correction to August 2017 RBA calculation

Pursuant to D&O No. 34581 issued on May 31, 2017, beginning June 2017, entries to the RBA to correct individual billing errors of \$5,000 or greater have been eliminated.

Amounts represent recovery of prior years' RBA balance through the RBA rate adjustment effective June 1, 2016 for the period June 2016 through May 2017 and June 1, 2017 for the period June 2017 through May 2018. See HECO-WP-B-001.

### HAWAIIAN ELECTRIC COMPANY, INC. DECOUPLING CALCULATION WORKBOOK DETERMINATION OF TARGET REVENUES

				Dockel No.	Docket No.	Docket No.	Docket No.	Docket No.	Docket No.	Dockel No. 2016-0328	Docket No. 2016-0329
	<b>=</b>	D-4		2010-0080	2010-0080 Amounts	2010-0080 Amounts	2010-0080 Amounts	2016-0328 Amounts	2016-0328 Amounts	Amounts	Amounts
Line No.	Description (a)	Reference (b)		Amounts (e)	Amounts (f)	(O)	(h)	(I)	(i)	(k)	Amounts (i)
	\ <b>a</b> /	(0)		(0)	117	191	***	117	· · ·	• • •	***
1	Last Rate Case Annual Electric Revenue at Approved Flate Levels	Note (1), (6), (8), (8a)	\$0005	\$ 1,765,954	\$ 1,765,954	\$ 1,765,954	\$ 1,765,954	\$ 1,581,445	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709
18	Less: Holdback of Interim Revenues	Note (6)	\$000s						\$	\$ -	\$ .
16	Less: Customer Benefit Adjustment	Note (6)	\$0005					\$ (6,000)	\$	S -	\$ .
									A 1007 0001	. (002.000)	B (807 C88)
2	Less: Fuel Expense	Note (1), (6), (6), (6a)	\$000s	\$ (65B,172)		\$ (658,172)	\$ (658,172)	5 (327,609)	\$ (327,609) \$ (466,211)	\$ (327,609) \$ (466,211)	\$ (327,609) \$ (466,211)
3	Purchased Power Expense	Note (1), (6), (8), (8a)	\$000\$	\$ (438,707)		\$ (438,707)	\$ (438,707) \$ (156,905)			\$ (466,211) \$ (135,915)	\$ (466,211) \$ (135,915)
4	Revenue Taxes on Une 1 to 1b (8.685% statutory rates)	-	\$000s	\$ (156,905)	\$ (156,905)	\$ (156,905)	\$ (156,905)	3 (139,334)	\$ (133,813)	3 [133,913]	3 (133,913)
5	Last Rate Order Target Annual Revenues	Sum Lines 14	\$000s	\$ 512,170	\$ 512,170	\$ 512,170	\$ 512,170	\$ 637,091	\$ 599,974	\$ 599,974	\$ 599,974
6	Add: Authorized RAM Revenues	Note (2)	\$000s	\$ 89.395	<b>5</b> 88,395	<b>s</b> .		s .	5	s .	<b>s</b> .
7	Less; Revenue Taxes on Line 9 at 6.865%	NOTE (E)	\$0005	\$ (7,854)		š .	š .	š .	š -	š	š ·
À	Nel RAM Adjustment - Test Year +5	Lines 9+10	\$000s	\$ 80.541	\$ 80,541	<u>s</u> .	\$ .	\$ .	\$ .	\$	\$ -
-											
9	Authorized RAM Revenues	Note (3)	\$000s	\$ -	\$	\$ 101,131	\$ 101,131	<b>\$</b> -	<b>s</b> -	\$	\$
10	Less: Revenue Taxes on Line 12 at 8.885%		\$000s	<u> </u>		\$ (8,986)	\$ (8,986)	<u> </u>	<u> </u>	<u> </u>	3
11	Net RAM Adjustment - Test Year +6	Lines 12 + 13	<b>\$</b> 000s	\$ -	s ·	\$ 92,146	\$ 92,146	\$ .	5 -	• -	· ·
12	Authorized RAM Revenues	Sch. A, Line 4	<b>\$</b> 000s	\$ -	\$	\$	\$	\$ -	\$ -	\$ 13,828	\$ 13,828
13	Less: Revenue Texes on Line 12 at 8.885%		\$000s	<u> </u>	<u> </u>	<u>-5</u>	<u> </u>	<u> </u>	<u></u>	\$ (1,229) \$ 12,599	\$ (1,229) \$ 12,599
14	Net RAM Adjustment · Test Year +1	Lines 15 + 16	\$000s	\$ -	\$	<b>S</b> .	5 ·	•	•	<b>3</b> 1∠,599	3 15,388
15	Less: EARNINGS SHARING REVENUE CREDITS	Sch. A, Line 5	\$000s	\$ -	5 -	\$ (16)	\$ (16)	\$ (16)		\$ .	<b>s</b> -
16	Less: Revenue Taxes on Line 15 at 8.885%		\$000a	<u>s</u> .	<u> </u>	<b>\$</b> 1.	\$ 1	\$ 1	<u>\$ 1</u>	<u> </u>	<u> </u>
17	Net Earnings Sharing Revenue Credits	Lines 18 + 19	\$000a	5 -	\$ -	S (14)	\$ (14)	\$ (14)	\$ (14)	5 -	\$
18	PUC-ORDERED MAJOR OR BASELINE CAPITAL CREDITS:	Sch. A. Line 6	\$000a	s .	s .	s .	\$ .	. 2	2	s -	\$
	. OV G. SELLES PROG. O. J. S. REELINE WILL HAVE A SELECTION OF THE SELECTI	54	•			<del></del>					
19	Total Annual Target Revenues										
20	June 1, 2016 Annualized Revenues w/RAM Increase	Col (e), lines (5+8+17+18)		\$ 592,711	\$ 592,711		_				
21	June 1, 2017 Armuelized Revenues w/RAM increase	Col (g). Ilnes (5+11+17+18)				\$ 604,302	\$ 604,302				
22	February 16, 2018 Annualized Revenues w/Interim Increase	Col (i), lines (5+11+17+18)						\$ 637,077	\$ 599,960		
23	April 13, 2018 Annualized Revenues w/2nd Interim	Col (j), lines (5+11+17+18)							<b>3</b> 398,800	\$ 612,574	\$ 612,574
24	June 1, 2018 Annualized Revenues w/RAM increase	Col (k), lines (5+14+17+18)	<b>30003</b>		-		Note (7)	Note (7), (9)	Note (9)	4 012,014	0.2.014
25	Distribution of Target Revenues by Month:	Note (4)	Note (5)	2015	2017	2017	2018	2018	2018	2018	2019
26	January	8.10%	8 19%		\$48,009,623		\$48,948,443				\$50,169.782
27	February	7.26%	7.59%		\$43,030,848		\$23,503,022	\$22,450,132			\$46,494,340
28	March	8.10%	8.10%		\$48,000,623			\$51,603,222			\$49,618,466
29	April	7.84%	7.98%		\$46,468,574			\$20,335,492	\$28,726,095		\$49,883,379
30	May	8.44%	8.40%		\$50,024,842				\$50,396,658	*** *** ***	\$51,456,187
31	June	8.47%	8.07%	\$50,202,656		\$51,184,359				\$49,434,694 \$53,293,908	
32	July	8.77% 9.04%	8 70% 8.94%	\$51,980,790 \$53,581,111		\$52,997,265 \$54,628,879				\$54,764,085	
33 34	August September	9.04% 8.68%	8.65%	\$51,447,350		\$52,453,393				\$52,987,621	
35	October	8.78%	8.84%	\$52,040,061		\$53,057,695				\$54,151,511	
38	November	8.26%	8.26%	\$48,957,962		\$49,915,326				\$50,598,584	
37	December	8.26%	8.28%	\$48,957,962		\$49,915,326				\$50,721,099	
38	Total Distributed Target Revenues	100.00%	100.00%		\$235,543,510		\$72,451,485	\$94,386,846	\$79,122,753	\$365,951,502	\$246,622,153
•	•										

Docket No.

Docket No.

Docket No.

Docket No.

\$35,971

0.46429

-\$603 \$2,143 0.60000 \$000s

\$000s

Docket No.

Docket No.

#### Footnotes:

- Docket No. 2010-0080 amounts derived from Order No. 30576, filed August 9, 2012, effective September 1, 2012, which implemented Decision and Order No. 30505, Exhibit A, page 1, filed June 29, 2012.
- Transmittel 15-02 filed March 31, 2016, establishing 2016 target revenue effective June 1, 2016. Transmittel 17-02 filed March 31, 2017, establishing 2017 target revenue effective June 1, 2017.
- 4 RBA Tarill Revised July 26, 2011 to reflect 2011 test year.
- RBA Tariff Effective February 16, 2018 to reflect 2017 test year.
- Test Year 2017 Interim Increase provided for In Interim Decision and Order 35100, Issued December 15, 2017 in Dockel No. 2016-0328:
- For the month of the initial implementation (Feb 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days:
- Test Year 2017 2nd Interim Increase provided for in Order No. 35335, issued March 9, 2018 in Docket No. 2016-0328:

  Reduction for Tax Act Implementation Leg (March 2018 Settlement Tariff Sheets, Attachment 3, tiled Merch 15, 2018, in accordance with Order No. 35335).

  For the month of the Initial implementation (April 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days:

#### HAWAMAN ELECTRIC COMPANY, INC. DECOUPLING CALCULATION MORKBOOK DETERMINATION OF RECORDED ADJUSTED REVENUES

_Line No		January 2017 (b)	February 2017 (c)	March 2017 (d)	April 2017	May 2017 (f)	June 2017 (g)	July 2017	August 2017	September 2017	October 2017	November 2017	(m)	Total	
	SILLED REVENUES.	(9)	(-)	(4)	101	**	197	(-1	1.7	4,	1-7	17	()		
1	Current month's blind revenues (SAPO14w)	125,776,075	121,693,823	127,000,652	133 129,624	132,902,891	134,693,715	141 025,561	142,955,339	145,159,197	141,388,662	136 001,586	127,650,383	1,609,380,698	
2	Remove PBF revenues	(1 663 679)	(1.507.352)	(1,524,996)	(1 600,980)	(1,624 110)	(1,669,133)	(1.567,132)	(1,358.186)	(1.400.985)	(1.358.680)	(1,301,561)	(1,197,645)	(17,772,446)	
3	Remove Soler Sever non-revenues	•			60 714	80 514	(10)		- '					141,227	
4	City & County traffic signal revenue adjustments		-	(9,472)	-		(9,519)			(9.454)	-		(9,510)	(37,955)	
5	Other electric revenues adjustments													<u> </u>	
6 =															
#Um 1-5	BILLED REVENUES	124,112,396	120,186,471	125,489,184	131 689,358	131,369,705	112,018,063	139,456,438	141,509,153	143,748,748	140,030,182	134,700,018	128,443,228	1,591,711,524	
7	UNBRIED REVENUES	83,790 799	81,226,108	70 431 772	70,257,498	73 278 172	74.670.985	78,883 494	84,690,390	80,678,983	82,128,621	76 454,549	77.212.019	893.681,200	
•	Current month's unbitled revenues (Unbitled Sales and Revenue Est)			(61,226,108)	(70,431,772)	(70 257 498)	(73,278,172)	(74,670,985)	(78,863,404)	(84,690,390)	(89,678,683)	(62 126,621)	(78,454,549)	(882 324 225)	
	Reverse prior month's unbitted revenues (Unbitled Sales and Revenue Est)	(65,855,044)	(53,780,799)	(01,220,160)	(70,431,772)	(/U 25/ 498)	(/3,2/8,1/2)	(14.610,985)	(78,603,404)	(040,040,040)	(60,070,653)	(02 120,021)	(40,434,349)	1002,224,223)	
9 = 7+8	Unblied revenues per Unbitted Sales and Revenue Estimate	(2.064.245)	(2,584,891)	9,205,664	(174,274)	3,020,674	1,392,813	4,192,419	5,826,986	(4 011,507)	1,447,733	(5.672.072)	757,470	11,356,975	
10	Recovery of 12-31-15 RBA balance through RBA Rate Adjustment beginning 6-1-18	(3,937,809)	(3,594,550)	(4,116,238)	(4,036,284)	(4,234,109)		_	_			_		(19 919 000) HEC	O-WP-8-001 page 1 o
iĭ	Recovery of 12 31-16 RBA betance through RBA Rete Adjustment beginning 6 1 17	10,507 2027	(-,,,	(-,,,	(,	(1,2511-20)	(3.951.922)	(4.214.357)	(4,351,190)	(4 180,899)	(4,200,512)	(3 778,375)	(3,624,054)		D-WP-8-001 page 2 t
12	ESM refund accrued					-	(15,525)		1,,,					(15,526)	- · · - · · · · · · · - ·
13	Reversal of ESM retund previously recognized in prior year						1,315	1 362	1,404	1,349	1,362	1,252	1,282	9.356	
14	RAM revenue recognized	(4,049,086)	(3,629,180)	(4,049,087)	(3,919,118)	(4 219,048)			•		•		·-	(19,865,517)	•
15	Accrual of ECAC adjustment	(1 637,500)	1,769,000	316 600	2,700,000	1,275,500	1,021 500	(625.800)	868,100	1,242,500	1,836,100	2,642,100	2,808,600	14,419,600	
16	Revenue of ECAC accrual	159,232	(1,606,600)	(1,505 800)	(1,505,800)	(348,367)	(349.367)	(349 366)	(1,665,966)	(1,865,968)	(1.665,D68)	(361,600)	(361,600)	(11,430,368)	
17	Accrual of PPAC edjustment	2 063,200	1,420,500	1,900,100	B24,600	1.944.700	537 900	498 200	<b>877,300</b>	1,091,200	522,300	1 835 200	2 147 200	15,762,500	
18	Reversal of PPAC accruel	(523,050)	(1,518,334)	(1.516.334)	(1,518,332)	(1,794,634)	(1,794,634)	(1,794,632)	(1,102,400)	(1,102,400)	(1.102,400)	(822,233)	(822.233)	(15,413,632)	
19	Reclass excess DSM revenues		- '				(113,018)	(481,798)	(26,995)	37,639	(76.297)	(4.582)	46,338	(600.711)	
20	Adjust prior period RBA betance	1,162	-	(9 468)	8295	7,049				(125)				6.913	
	Adjust prior period RBA related revenue taxes	113		(923)	609	687				(13)				673	
22	Accrual of current month's RBA (PUC Monthly Financial Report pg. 9A)	4,771,915	2,605,657	2,219 975	2,185,761	3.751,603	4,714,471	4,484,498	3,678,269	4,862,005	4,750.031	5,280,774	0 184,728	49.460.560	
23	RBA gross up for revenue taxes	485,319	254,088	216,479	211,192	365,834_	459,727	437,301	358,683	474,114	463,195	514,949	603,098	4,823,879	
24 = sum 10-23	Miscefereous unbited accruele	(2,056,620)	(4,299,519)	(6,647,596)	(5,168,985)	(3,251,795)	610,446	(2,224.590)	(1,564,795)	759,403	527,812	5,409,515	6,984,359	(11,052,456)	
25 = 9+24	UNBILLED REVENUES	(4,160,885)	(0,864,210)	2,567.900	(5,343,280)	(221,111)	1,803,259	1,967,829	4,282,190	(3,252,104)	1,076,650	(282,557)	7,741,629	304,510	
26 = 6+25	TOTAL REVENUES PER C/L (PUC Monthly Financial Report pg. 3)	110,001,532	113,382,250	128,027,163	125.246,009	131,128,183	134,918,311	141,428,267	145,861,343	140,498,843	142,005,733	134,437,461	134,105,057	1,892,010,042	
	Billed Adjustments to Orderntse Adjusted Revenues for RBA;													41.415	
27	Add back C&C unmetered revenue			8,472			9,519			9 454			P,510	37,955 4,053	
	Add back diplometic hix exemption (sect. exempted revitaxes on PBF surcharge)	303	312	304	325	327	351	381	358	370	391	340	311		
29	Remove TY 2011 refund	(12)	•		•		(5)	•		3	•	•	•	(14) 311	
30	Remove TY 2009/2007 refund / Increase & other rate adjustments Remove ECAC revenues	172 15,550,415	9 870 287	9,043,059	e 825,075	10,478,306	139 12.603.605	12,142,563	12.157.197	13,345,987	13,187,683	12 161 027	9.921.624	139.248.121	
31	Remove PPAC revenues		(11.545,895)	(14,161,259)	(14 039,457)	(15,181,690)	(15,760,226)	(16 462 113)	(16,297.102)	(18,412,037)	(15,05B,115)	(15 137 235)		(177.932.511)	
32 33	Remove REIP revenues	(12,298,620)	(11.343,883)	(14,101,238)	(14 838,437)	[13,161,030]	(13,700,220)	(10 402,113)	(10,207.102)	(10,412,001)	(13.230,113)	(13. 3. 233)	(10,700,750)	2	
34	Remove DSM revenues	(410.747)	(375,661)	(381,946)	(384 418)	(388,455)	(977,701)	(394,522)	(401,160)	(412 752)	(401,804)	(384,480)	(353,088)	(4,645,826)	
35	Remove IRP revenues	(-10.7-7)	(015,001)	100110-07	p.0	,,	(2.1.)	,,	(101,100)	(,	,,	()	(,,		
38	Remove treatment terms of PRF revenues.	(113,469)	(102,606)	(104,010)	(109,192)	(110,770)	(113,840)	(108.884)	(92,496)	(05,552)	(82,666)	(86,771)	(81.683)	(1,212,139)	
37	Remove Soler Saver revenues	1	(	1.5-16-15	3 921	5 199	(1)	1	5		1	,		0.132	
38	Ramova revenue taxas on biled retenues	(11,289,651)	(10,487,215)	(10,650,957)	(11 111,280)	(17 211 712)	(11,495,155)	(11 P60 796)	(12,169,425)	(12.455.366)	(12.151.622)	(11.660,753)	(10,846,733)	(137.470.355)	
39	Remove base lust (adjusted for revenue laura)	(47,030 885)	(43.518.870)	(44,087,330)	(46,282,374)	(48,938,472)	(47,985,913)	(50.064 142)	(51,030,656)	(52 510,341)	(\$1,300,001)	(49 174 087)	(45,183,941)	(575,647,712)	
40	Remove power purchase energy (adjusted for revenue taxes)	(20,005 053)	(18.300.230)	(18,591,620)	(19 526,129)	(19,602,930)	(20,236,398)	(21,130 061)	(21,529,386)	(22 153,653)	(21.543,350)	(20.748.116)		(242,877,599)	
41	Other adjustments	1.259		(9,468)	8,295	7,048								7,135	
	Other operating revenues - EV-U revenues net of revenue taxes	2.087	4,147	4,239	4,391	5,310	4,864	4,967	5,135	5,267	5,452	5.243	7,260	58,362	
	Other operating revenues - SMNP revenues nat of revenue taxes		•		1,913	4,142	6,497	7 052	7,533	8,558	9,278	9,860	10,050	64,683	
	Unbilled Adjustments to Determine Adjusted Revenues for RBA.											fa c	(4 5	4.70	
44	Remove ESM refund accruel & reversal				20104:5	4 21 8 24	14 211	(1,362)	(1,404)	(1,348)	(1,363)	(1,262)	(1,252)	6,170	
45	Rumove RAM revenue recognized	4 049,086	3,629,180	4,049,087	3 919,116	4 218,048	H MA 400	/200 ESS!	1 148 388	74.290	(449 200)	(994,885)	(1.685.826)	19,665,517 (5,470,508)	
48 47	Remove ECAC revenues Remove ECAC accrus)	(4 862,834)	(1,060,564)	331,649 1 290 200	(351,741)	2,567,428	(303,625) (672,133)	(290,585) 1,175 (68	1,148,365	74,290 423,468	(132,390) (170,132)	(2,280,500)	(1,685,826) (2,448,000)	(5,470,508)	
	Remove ECAC accrual Remove PPAC revenues	878,266	(162,200)			(926,133) (698.712)	(672,133) (175,362)	1,175 166 (426,976)	(389,879)	423,466 381,641	(170,132) (93,615)	(2,280,500) 935,500	(2,448,000) 139,745	(2,989,232) (687,780)	
4B 4B	Ramove PPAC accruel	2,509,559 (1,540,134)	(1,313,767) 97,734	(1,052,167) (381,765)	7,045 693,732	(150,066)	1,258,734	1 203 432	225,100	11,200	580,100	(1,112,957)	(1.324.967)	(348,868)	
48 50	Ramove DSM revenues	(1,540,134) 17,993	17,542	(29,030)	20,712	(13,244)	(3.267)	(12.151)	(18,780)	9,391	(3,155)	20,299	3,589	9.829	
50 51	Remove excess DSM revenues	17,293	17.542	129,030)	20,112	113,244)	113 018	451 790	29,895	(37,639)	76.297	4.582	(46,336)	500 711	
62	Remove prior period RBA edjustment(s)	(1,275)	-	10,391	(9,104)	(7,736)		-01.790	20.000	(37,039)		-302	(-0.000)	(7.506)	
53	Ramove RBA accorats	(4,771,815)	(2,605,657)	(2,219,975)	(2.165,781)	(3.751,603)	(4.714 471)	(4.484.498)	(3 678.268)	(4,862,005)	(4.750.031)	(5,280,774)	(6.184,728)	(49.469.506)	
54	Remove RBA gross up for revenue laxes	(465,319)	(254,068)	(210,478)	(211,192)	(365,834)	(459,727)	(437,301)	(355,683)	(474,114)	(463,185)	(514,949)	(603,098)	(4.023.970)	
55	Remove revenue texas on unblied revenues	740,772	801,073	(385 508)	402,005	(57,045)	270,225	86.784	{197,647}	686,534	264,945	842,949	383,750	3 819 837	
55	Remove bean two (adjusted for revenue taxes)	2,098,945	2,088,414	(3,323 184)	199,060	(1.797,573)	(318,454)	(1,587,486)	(2,338,716)	1,082,258	(464 084)	2,534,579	485 065	(1.348 176)	
57	Remove power purchase energy (adjusted for revenue leases)	#85,52G	881,084	(1,402 022)	63,981	(758,380)	[133,509]	(669,747)	(985,684)	480,815	(195,793)	1,069,316	198,629	(568,764)	
50 <del>-</del>					***		ACD 446 455	/00 0 · 6 FTT	104 040 777	for one catal	(00 650 655)	MA 444 FAA			
58 = Bulm 27-57	Total billed and unbilled adjustments to determine adjusted revenues for RBA RECORDED ADJUSTED REVENUES FOR RBA DETERMINATION	(76,723,724)	(72 897,068)	(82,237.505)	(81,943,287)	[64,854,844]	(88,448,423)	(92,913,500)	(94,910,732)	(92,905.255)	(93,698 059)	(89.802,909)	(90.454.459)	(1,041,789,875)	

NOTE: Totals may not add exactly due to rounding.

# HAWAIIAN ELECTRIC COMPANY, INC. DECOUPLING CALCULATION WORKBOOK DETERMINATION OF OBM RAM ADJUSTMENT (\$ in Thousands)

Line No.	Decription	Reference	20	ocket No. 016-0328 pproved	Footnote 4 Previously Approved RAM	Ε	A Subject to scalation of (c) + (d)	Net Inflation Indices Footnote 2	O8 Ad	2018 M RAM justment
	(a)	(b)		(c)	(d)		(e)	- (f)		(g)
1	Base BU Labor Expenses	Schedule C1	\$	47,048	•	\$	47,048	2.24%	\$	1,054
2	Base Non-Labor Expense	Schedule C2	\$	134,734		\$	134,734	2.10%	\$	2,829
3	Payroll Taxes	Footnote 1	\$	3,943		\$	3,943	2.24%	\$	88
4	Subtotal Expense Increase - RAM Adju	stment before reve	nue 1	taxes					\$	3,972
5	Revenue Tax Factor (Footnote 3)									1.0975
6	O&M RAM (SubTotal Expenses x Rev	Tax Factor)							\$	<b>4,359</b> To Sch A1
	Footnotes:  1: Payroll Taxes per Stipulated Settlem in Docket No. 2016-0328, Exhibi	t 2C, page 6				\$	9,342			
	Less: Portion of payroll taxes related Payroll Taxes related to Bargaining L		(57.	79% * 9,342	)	\$	(5,399) 3,943			
	A See Schedule C1 for calculation	n of percentage rel	ated	to non-BU la	bor.					
	2: Escalation Rates Labor:	2018								
	Bargaining Unit Wage Increase	3.00%	(Se	e HECO·WF	P-C-001)					
	Less: Labor Productivity Offset	0.76%	App	roved in Fina	I D&O in Docke	1 No. 2	008- 0274, pa	ge 51, filed on A	ugust	31, 2010
	Labor Cost Escalation Rate	2.24%								٠
	Calculation of 2018 Compounded La	oor Cost Escalation	n							
	2018 Labor Cost Escalation			1.0224	A (2018 labor	escalat	ion plus 1)			
	2018 Compounded Labor Cost Esc	alation		1.0224	B = A					
	2018 Compounded Labor Cost %			0.0224	C = B · 1					
	Non-Labor:	2018								
	GDP Price Index	2.10%	(Se	e HECO-WF	P-C-002)					
	Calculation of 2018 Compounded No	n-Labor Cost Esca	lation	า						
	2018 Non-Labor Cost Escalation			1.0210	A (2018 non-la	toor es	calation plus	i)		
	2018 Compounded Non-Labor Cos	t Escalation		1.0210	B = A	•				
	2018 Compounded Non-Labor Cos	st %		0.0210	C = B - 1					
	3: Computation of Revenue Tax Factor									
	Public Service Tax Rate			0.05885						
	PUC Fees Rate Franchise Tax Rate			0.00500 0.02500						
	Total Revenue Tax Rate			0.02500						
	Revenue Tax Factor = 1 / (1 - Total Revenue Tax Rate	4		1.0975						

<sup>4:</sup> Column d "Previously Approved RAM" is not used as the labor and non-labor escalation is accomplished through the use of a compounded escalation rate in column 1, as shown in footnote 2.

# HAWAIIAN ELECTRIC COMPANY, INC. DECOUPLING CALCULATION WORKSHEET RATE ADJUSTMENT MECHANISM SUMMARY OF

## OPERATIONS AND MAINTENANCE LABOR AND NON-LABOR EXPENSE

#### BY BLOCK OF ACCOUNTS Interim D&O - Docket No. 2016-0328 (\$ in Thousands)

	Foot	note 1		Footnote 2	
	(a)	(b)	(c)=(a)+(b) TOTAL	(d)	(e)
<u>DESCRIPTION</u>	BU LABOR	NON-BU LABOR	LABOR	NON-LABOR	<u>TOTAL</u>
Production	21,744	13,212	34,956	44,350	79,306
Transmission	2,420	2,933	5,353	10,454	15,807
Distribution	12,086	7,321	19,407	27,418	46,825
Customer Accounts	8,258	3,618	11,876	8,478	20,354
Allowance for Uncoll Accounts	-		-	732	732
Customer Service	134	5,582	5,716	9,936	15 652
Administrative & General	2,406	31,769	34,175	85,583	119,758
Customer Benefit Adjustment (Footnote 3)				(10,023)	(10.023)
Operation and Maintenance	47,048	64,435	111,483	176,92B	288,411 X
•	To Sch C			To Sch C2	
Percentage of Total O&M Labor	42.20%	57.79%	100%		

<sup>\*</sup> amounts may not add due to rounding

#### Footnotes:

- 1 SOURCE: 2017 test year breakdown of BU and non-BU labor obtained from UI Planner Budget files.
- 2 O&M breakdown below includes fuel and purchase power expenses consistent with the presentation in the Results of Operations.

Г	Footnote 2a			Footnote 2b STIPULATED	
_					
	LABOR	NON-LABOR	TOTAL	ADJUSTMENT	SETTLEMENT
FUEL		327,609	327,609		327,609
PURCHASE POWER	-	466,211	466,211		466,211
PRODUCTION	34,956	44,350	79,306		79,306
TRANSMISSION	5, <b>35</b> 4	10,454	15,808		15,808
DISTRIBUTION	19,407	27,418	46.825	•	46,825
CUSTOMER ACCOUNTS	11,876	8,478	20,354		20,354
UNCOLLECTIBLE ACCOUNTS	-	732	732		732
CUSTOMER SERVICE	5,715	9,936	15, <b>6</b> 51	•	15,651
ADMIN & GENERAL	34,265	85,945	120,210	(452)	119,758
CUSTOMER BENEFIT ADJUSTMENTS	-	-	-	(10,023)	(10,023)
TOTAL	111,573	981,133	1,092,706	(10,475)	1,082,231
TOTAL O&M EXPENSE (Excl Fuel & Purch Power)	111,573	187,313	298,886	(10,475)	288,411 X

- 2a See Order No. 35280, For Approval of General Rate Case and Revised Schedules/Rules, filed on February 9, 2018, in which the Commission approved the revised schedules or operations and tariff sheets filed January 19, 2018, Exhibit A, Page 1 of 4, See Docket No. 2016-0328 Hawaiian Electric 2017 Test Year Rate Case Revised Schedules Resulting from Interim Decision and Order No. 35100 as modified by Order No. 35229 and Order No. 35220, filed January 19, 2018, Exhibit 2, Attachment 1, Page 1 for Labor/Non-Labor breakdown.
- 2b See Order No. 35335, For Approval of General Rate Case and Revised Schedules/Rules, filed on March 9, 2018, in which the Commmission accepted the Parties' Stipulated Settlment on Remaining Issues filed March 5, 2018, Exhibit 2C, Page 1 of 13.
- 3 Customer Benefit Adjustments identified in the Results of Operations have been included as a reduction to O&M non-labor subject to escalation. See Order No. 35335, For Approval of General Rate Case and Revised Schedules/Rules, filed on March 9, 2018, in which the Commmission accepted the Parties' Stipulated Settlment on Remaining Issues filed March 5, 2018, Exhibit 2C, Page 1.

#### HAWAIIAN ELECTRIC COMPANY, INC. DECOUPLING CALCULATION WORKBOOK

### Non-Labor Exclusion Adjustment for O&M RAM

(\$ thousands)

Line No.	Decription	Amount	Reference
	(a)	(b)	(c)
1 2 3	Pension Expense	73,940	Note 1
4 · 5	OPEB Expense	(470)	Note 1
7 8	Total before amounts transferred	73,470	
9 10 11 12	O&M % (1- transfer rate of 42.57%)	57.43%	See Parties' Stipulated Settlement Letter, filed November 15, 2017, in Docket No. 2016-0328, HECO T-16 Attachment 4, page 1
13 14 15 16	Adjustment to Non-Labor O&M Expense for O&M RAM base	42,194	, page 1
17 18 19	Non-Labor O&M Expense per Interim D&O	176,928	Schedule C1
20 21	Non-Labor O&M Expense Base for O&M RAM base	134,734	Schedule C

Note 1 See Parties' Stipulated Settlement Letter, filed November 15, 2017 in Docket No. 2016-0328, Exhibit 1, page 63 for the summary of the pension and OPEB cost the Parties agreed to. In Parties' Stipulated Settlement Letter on Remaining Issues, filed March 5, 2018 in Docket No. 2016-0328, Exhibit 1, page 4, amortization of the excess pension contribution from the test year was reduced to zero.

### HAWAIIAN ELECTRIC COMPANY, INC. DECCUPLING CALCULATION WORKBOOK DETERMINATION OF RATE BASE RAM ADJUSTMENT - RETURN ON INVESTMENT

Line No.	Description (a)	AMOUNTS IN THOUSANDS (b)	PERCENT OF TOTAL (c)	COST RATE (d)	POST TAX WEIGHTED EARNINGS REGMTS (e)	INCOME TAX FACTOR (Note 1) (f)	PRETAX WEIGHTED EARNINGS REQMTS (g)
1	PUC APPROVED CAPITAL STRUCTL	IRE & COSTS (No	ote 2):				
2	Short-Term Debt	\$ 27,770	1.18%	1.75%	0.02%	1.000000	0.02%
3	Long-Term Debt	928,748	39.59%	5.03%	1.99%	1.000000	1.09%
4	Hybrid Securities	28,651	1.22%	7.19%	0.09%	1.000000	0.09%
5	Preferred Stock	21,137	0.90%	5.37%	0.05%	1.346835	0.07%
6 .	Common Equity	1,339,335	57.10%	9.50%	5.42%	1.346835	7.31%
7	Total Capitalization	\$ 2,345,841	100.00%		7.57%		9.47%
8	RAM CHANGE IN RATE BASE \$000	(From Schedul	e D1)				\$ 49,138
9	PRETAX RATE OF RETURN (Line 7, 6	Col g)				•	9.47%
10	PRETAX RETURN REQUIREMENT						\$ 4,653.4
11	REVENUE TAX FACTOR (1/(1-8.8859	o))					1.0975
12	RATE BASE RAM - RETURN ON INVE	STMENT \$000					\$ 5,107.1 To Sch A1

#### Footnotes:

25.75% See HECO-WP-F-001 1.346835

Composite Federal & State Income Tax Rate Income Tax Factor ( 1 / 1-tax rate)

<sup>2</sup> See Order No. 35335, For Approval of General Rate Case and Revised Schedules/Rules, filed on March 9, 2018, in which the Commmission accepted the Parties' Stipulated Settlment on Remaining Issues filed March 5, 2018, Exhibit 2C, Page 2 of 13.

## HAWAIIAN ELECTRIC COMPANY, INC. DECOUPLING CALCULATION WORKBOOK DETERMINATION OF RATE BASE RAM ADJUSTMENT - CHANGE IN RATE BASE \$ in thousands

		HE	CO 2017 Test Yea	ar Re	ite Base (Note 2)		HEC	O 201E	RAM Rate	Base	<u> </u>	
			Beg. Balance	ъ.	udgeted Balance	_	Adjusted ecorded at	DAM	l Projected	c.	stimuted at	
Line No.	Description		12/31/2017	DL	12/31/2017		2/31/2017		mounts		2/31/2018	
	(a)		(b)		(c)		(d) (Note 1)	Son F	(e) Setall Below		(f)	
1 2	Nat Cost of Plant in Service Property Held for Future Use	\$	2,595,452	\$	2,770,695	\$	2,749,624	\$	105,051	\$	2,854,675	
3	Fuel Inventory		46,200		46,200	7	Sec. 15. 16	4.462.	PENNSTER .	7		
4	Materials & Supplies Inventories		28,427		28,427	rž.	nineriseksik		e Elements			
5 6	Unamort Net ASC 740 Reg Asset Unamort EOTP Reg Asset		70,144 444		74,887 89	715	Not in		te Base are for RAM Pu			
7	CIP CT-1 Reg Asset		2,306		1,352	. 77	创新选品	41/12/1		3.3	W 12 AS	
8	-		•									
9 10												
11	Unamori Sys Dev Costs		15,932		13,496	7.5	Tel Thirty Law	- Thes	e Elements	100		(Note 5)
12	RO Pipeline Reg Asset		4,958		4,842	وي		of Ra	te Bace are	BOD.	S 18 8 1	,
13	Pension Tracking		97,620		113.828	A. 1			ior FIAM Pu			
14 15	Contrib in Excess of NPPC Total Additions	3	6,470 2,867,953	•	6,470 3,060,286	, v.	3.030.670		105.051		3.135.721	
	TOTAL AGGINOTIS	•	2,007,933	•	3,000,200	3	0,000,000	•	103,031	•	0,100,721	
16	Unamortized CIAC	\$	(347,826)	\$	(395,134)	\$	(399,366)	\$	(29,773)	\$	(429,139)	(Note 3)
17	Customer Advances		(3,581)		(3,925)	7.7		A NATA	Updated	$\mathcal{C} \in \mathcal{C}$	A STATE OF	(Note 3)
18 19	Customer Deposits Accumulated Def Income Taxes		(12,101) (520,643)		(12,005) (333,360)	( "-	(283,139)	- SENOI	(3,753)	12.	(286,892)	(Note 4)
20	ADIT Excess Reg Liability		(320,040)		(203,950)		(274,687)		7,121		(267,566)	(Note 4)
21	Unamortized State ITC (Gross)		(56,323)		(54,903)		100	ru - r S vir	1.2	130	#1.5.18 G	
22 23	Unamortized Gain on Sale Pension Reg Liability		(248)		(182)	1	<b>NEW 19</b>	Not	Updated	1	3 2 7 3	
24	OPEB Reg Liability		(2,817)		(2,331)	2.0	7 10		24 Fr 1973	1	な。成为4500mm である。4000mm	•
25	Total Deductions	\$	(943,539)	\$	(1,005,790)	\$	(1,031,400)	\$	(26,405)	\$	(1,057,805)	
26	Working Cash		3,904		3,904	27.5	(3/2/3,904)	·/☆Not	Lipdated :	, Ç	्रश्च २ <b>३.904</b> ]	
27	Rate Base at Proposed Rates	\$	1,926,318		2,058,400	5	2,003,174			S	2,081,820	
28 29	Average Rate Base Change in Rate Base			\$	1,993,359				J	8	2,042,497 49,138	To Schedule D
30	Column_(e) Projected Changes to Rate Bas	se·			Reference	A	mount \$000					
31	Plant - Baseline Capital Project Additions	_			Schedule D2		252,931	•				
32 33	Major Project Additions Accumulated Depreciation/Amortization C	·h	_		Schedule D3 Schedule E		(147,880)					
34	Net Plant	nang	•	S	um; Lines 31-33	_	105,051	-				
35	Accum Del Income Taxes - Baseline and	Maio	r Capital Projects		Schedule F		(3,753)	•				
36	Excess ADIT Reg Liability Amortization	·	, ,		Schedule D5	Ξ	7,121	•				
37	Projected CIAC Additions - Baseline				Schedule G		(38.472)					
38 39	Projected CIAC Additions - Major Projects Less. Amortization of CIAC	S			Schedule G2 Schedule G		(119) 8,819	,				
40	Total Change in CIAC in Rate Sase			Sı	m: Lines 37-39	_	(29,773)	_				
	Footnotes:											
1	Amounts are recorded, except for the folio	gniwo	adjustments:		Ann Done		ÇIAC Net		ADIT		OIT Excess Reg Liab	
			lant in Service	_	Acc. Depr.		Chedule G	Sci	nedula D4		chedule D5	
[A]	Unadjusted Balance Add:	\$	4.536,540	\$	(1,494,205)	\$	(399,366)		(283,155)		(274,687)	
[A]	Retirement Work in Progress				42,592							
[A]	Asset Retirement Obligation				(2,539)						•	
[A]	Reg Liab-Cost of Removal (net salvage) Tenant Improvement Allowance (Sch E)		(14,058)		(327, <b>22</b> 5) 8,662							
	Major Project Adjustments:	H	ECO-WP-D2-001		HECO-WP-E-001			HECO	-WP-D4-002	:		
	ERP EAM Hardware		(14)						2		-	
	Koolau-Wallupe #1 Str 30 P9 Replace	_	(129)		-	_	<del>-</del> -		14	_	<u> </u>	
	Total Adjustments	\$	(143)	\$	•	\$	-	Ş Sche	16 adula D4	\$ Sch	edule D5	
	Adjusted Balance	\$	4,522,339	\$	(1,772,715)	\$	(399,366)		(283,139)	\$	(274,687)	

- 2 See Order No. 35335, For Approval of General Rate Case and Revised Schedules/Rules, filled on March 9, 2018, in which the Commission accepted the Parties' Stipulated Settlment on Remaining issues filled March 5, 2018, Exhibit 2C, Page 3 of 13. Revised for presentation purposes only to properly reflect the Unamortized Net ASC 740 Reg Asset, ADIT, and ADIT Excess Reg Liability balances. No change to Total Average Rate Base.
- 3 As of December 2017, the Company reclassified cash CIAC received from Developers, subject to refund, from CIAC to Customer Advances. Leaving this amount unchanged from the balance at 12/31/17 would result in an overstatement of rate base. See further discussion at Schedule G1.
- 4 As a result of the 2017 Tax Reform Act, Regulatory Liability accounts were created and recorded as of December 31, 2017 to isolate the 2017 excess accumulated deterred taxes resulting from the lower federal tax rate. The bifurcated Regulatory Liabilities are included as a reduction to Rate Base. See further discussion at Schedule F.
- 5 HECO 2017 Test Year Rate Base includes CIS deterred costs in Unamortized System Development Costs. See detail in November 15, 2017, Stipulated Settlement Letter, HECO T-17, Attachment 1, Page 2.
- [A] SOURCE: Hawakan Electric Company, Inc. Monthly Financial Report December 2017, pages 8 and 10, filed March 1, 2018

### HAWAIIAN ELECTRIC COMPANY, INC. DECOUPLING CALCULATION WORKBOOK DETERMINATION OF BASELINE CAPITAL PROJECTS ADDITIONS

#### Source: Docket No. 03-0257 General Order No. 7 Plant Additions Annual Reports filed with the PUC dated:

				3/28/2014	3/27/2015	3/29/2016	3/30/2017	NOTE (1)
ine No.	Descriptio	n		2013	2014	2015	2016	2017
	(a)			(b)	(c)	(d)	(e)	(f)
1 2	Total Plant Additions Less: Non-Utility Plant Additions		NOTE (2)	272,820,344	269,326,250	<b>266,537,660</b> (63)	<b>241,294,569</b> (3,954)	276,754,129
3	Adjusted Total Plant Additions		NOTE (2)	272,820,344	269,326,250	286,537,597	241,290,615	276,754,129
4	najasas roam ann namono			2. 2/020/077	250,020,200	2-0,00.,-0.	,	
5	Less Major Projects: (+\$2.5 Million)	<u>Dki No.</u>	<u>Item No</u>					
6	0000 la conicci							
7 8	2008 In-service: CIP Generating Unit	05-0145	Y49000	(1,809,875)				
9	On denotating office	05 0145	140000	(1,000,010)				
10	2010 In-Service:							
11	K3 Biofuel Co-Firing	2009-0155	P0001577	(4,608)				
12								
13	2011 In-Service:		DD050000	(45.504)	40 500	ma	•	
14	W8 Boiler Controls Upgrade	-2007-0365	P7650000	(45,384)	18,503	(70)	(eng)	
15	EOTP Ph. 2 (Subs/Switch Stations) W7 Controls Upgrade	2010-0062 2009-0195	Y48500 P7590000	(184,448) (308,336)	(7,357) (8,237)	(55,681) (35)	(682)	
16 17	W8 Main Transformer Replace	2009-0195	P0001399	47,320	(0,237)	(33)		
18	TO Main Hansionne rieplace		1 000 1000	-1,020				
19	2012 In-Service:							
20	K1 Condenser Tube Replace	2010-0126	P0000681	(1,850)				
21	BPT Tank 132 Improvements	2010-0286	P0000899	(547)				
22	Mobile Radio Replacement	2010-0162	P0001595	(61,573)				
23	Kapolei Substation	2011-0026	Y00127	(780,700)	(6,459)			
24								
25	2013 In-Service:							
26	Pukele 80MVA Tsf #3	2011-0156	P0001494	(4,299,560)	(28,327)	15,611		400.000
27	Kakaako Makai-Iwilei 25kV DL	2009-0042	Y00038	(6,661,331)	(485,650)	(496,818)		400,000
28	Kaloi Substation - Land	2008-0070	Y00119	(2,276,439)		(0.400)		
29	North South Road 46kV Line	2008-0070	Y00119	(2,099,046)		(3,488)		
30 31	2014 In-Service:							
32	Kaloi Substation	2008-0070	Y00119		(6,548,755)	(925)		
33	Kaloi Sub 46kV & 12kV Distr	2008-0070	Y00119		(1,218,895)	(020)		
34	Kaloi Telecomm	2008-0070	Y00119		(171,237)			
35	Kaloi Sub 12kV Work	2008-0070	Y00119		(25,906)			
36	Kakaako Makai-Kewalo 25kV DL	2009-0042	YD0038		(4,958,840)	(464,900)	(111)	400,000
37	Kakaako Makai DOT Queen-Cook	2009-0042	Y00038		(1,981,600)	(418,816)	(2,890,742)	476,166
38	BPT Tank 133 Improvements	2010-0318	P0000900		(6,095,787)	(1,092,308)		
39	Pukele 80MVA Tsf #2	2011-0156	P0001492		(3,449,859)	(40,084)		
40	DOT Airport DSG	2008-0329	P0001370		(4,965,396)	(97,130)	(172,652)	(94,001)
41	****			÷				
42	2016 In-Service:	0011 0150	P0002264				(2 P20 101)	(7,612)
43 44	Pukele 80MVA Tsí #1	2011-0156	P0002204				(3,839,121)	(7,012)
45	2017 In-Service:							
46	ERP EAM Hardware	2014-0170	Y00168					(2,604,146)
47	Koolau-Wailupe #1 Str 30 P9 Replace		P0003465					(2,684,387)
48 49	Total Net Plant Additions (excluding	major project	:s)	254,333,967	239,412,448	263,882,953	234,387,307	272,640,149
50	Land Floor Vana Assessed							ê 252 B24 255
51	Last Fi <del>ve-</del> Year Average						_	\$ 252,931,365 To Sch D1
								10 3611 0 1

NOTE (1): Amounts per HECO-WP-D2-002 and the Hawaiian Electric Companies' Exemption From and Modification of General Order No. 7 Paragraph No. 2.3(g), Relating to Capital Improvements Capital Projects Completed in 2017, in Docket No. 03-0257, filed on March 27, 2018.

NOTE (2): Source: UI Planner Budget files: Actuals Scenario. Adjustment to remove non-utility plant additions from utility plant. Chapin UG Duct Line is a non-utility asset. It is a contributed asset that was given to the Company. It is not being used and there are currently no plans to use it.

Attachment 1 Trans. Nos. 18-01, 18-02, and 18-03 Page 13 of 28

## HAWAIIAN ELECTRIC COMPANY, INC. DECOUPLING CALCULATION WORKBOOK DETERMINATION OF MAJOR CAPITAL PROJECT ADDITIONS

Line No.	Description (a)	PUC Docket Reference (b)	Estimated In Service Date (c)	Amount (d)
1 2		<b>、</b>		
3	Total Major Capital Projects Qualifying for 2	2018 RAM (See HECO-WP-D3-001)		\$ - To Sch D1

See Schedule G2 for related CIAC (If applicable)

## HAWAIIAN ELECTRIC COMPANY, INC. DECOUPLING CALCULATION WORKBOOK DETERMINATION OF ADJUSTED RECORDED DEFERRED INCOME TAXES

			DR/(CR)	DR/(CR)	DR/(CR) Total	
Line No.	NARUC Account	Reference	Federal ADIT	State ADIT	ADIT	
	(a)	(b)	(c)	(d)	(e)	
1	Recorded Deferred Income Tax Balances December 31, 2017 Recorded Balances					
2	Depreciation Related Account 282	HECO-WP-D4-001	(197,658,805)	(31,558,691)	(229,217,496)	
3	Other Deferred Income Taxes	HECO-WP-D4-001	(44,852,044)	(9,085,106)	(53,937,150)	
4	Total Recorded Deferred Income Taxes		(242,510,849)	(40,643,797)	(283, 154, 646)	To Sch D1
5	Adjustments to Recorded Balances:					
6	ADIT on Major Project excess depreciation	HECO-WP-D4-002	15,713	461	16,174	
7	Total Adjustments to Recorded ADIT Balance	ces .	15,713	461	16,174	To Sch D1
8	Adjusted Recorded ADIT Balances -12/31/17		(242,495,136) To HECO-WP-F1-0	(40,643,336) 103	\$ (283,138,472)	To Sch D1

## HAWAIIAN ELECTRIC COMPANY, INC. DECOUPLING CALCULATION WORKBOOK DETERMINATION OF ADJUSTED RECORDED EXCESS ADIT REGULATORY LIABILITY

			•					•
			` DR/(CR)	DR/(CR)	DR/(CR) Adjusted/Recorded			Est Bal
Line No.	NARUC Account	Reference	ADIT	Reg Liab	at 12/31/17	Life	Amortization	at 12/31/18
	(a)	(b)	(c)	(d)	= (c) + (q)	(f)	(g) = (e) / (f)	(h) = (e) + (g)
1	Recorded Excess ADIT ADIT Recorded Excess ADIT ADIT ADIT ADIT ADIT ADIT ADIT ADIT		/ Balances					
2	Plant 282 - protected		(160, 155, 102)	(55,547,395)	(215,702,497)	0		(215,702,497)
3	Plant 283 - unprotected		(26,035,756)	(9,030,111)	(35,065,867)	15	2,337,724	(32,728,143)
4	Nonplant 283 - unprotecte	d	(17,759,008)	(6,159,446)	(23,918,454)	5	4,783,691	(19,134,763)
8	Total Excess ADIT Regula	tory Liability	(203,949,866)	(70,736,952)	(274,686,818)		7,121,415	(267,565,403)
				· <b>_</b>	to Sch D1		to Sch D1	to Sch D1

SOURCE: HECO-WP-D5-001

## HAWAIIAN ELECTRIC COMPANY, INC. DECOUPLING CALCULATION WORKBOOK DETERMINATION OF DEPRECIATION & AMORTIZATION RAM ADJUSTMENT

Lin <del>a</del> No.	NARUC Account	Recorded Depreciable/Amort. Balance (Footnote 3)	Adjustments (Footnote 1)	Adjusted Depreciable/Amort. Balance	PUC Approved Accrual Rate	Annual Accrual
	(a)	(b)	(c)	(d)	(e)	(f)
	(4)	(5)	(-)	1-7	1-7	ν-/
1	<u>Depreciable Plant</u>					
2	311	102,187,021		102,187,021	0.01600	1,634,992
3	312	398,395,485	(2,365,000)	396,030,485	0.02030	8,039,419
4	314	191,175,201		191,175,201	0.01540	2,944,098
5	315	83,857,175		83,857,175	0.02430	2,037,729
6	Tot - Steam	775,614,882	(2,365,000)	773,249,882	0.01890	14,656,239
7					0.00	224 450
8	341	38,240,688		38,240,688	0.00770	294,453
9	342	16,784,964		16,784,964	0.02580	433,052
10	343	67,717,111		67,717,111	0.03260	2,207,578
11	344	32,288,863		32,288,863	0.01010	326,118
12 13	345	34,193,476		34,193,476	0.02510	858,256
13	Tot - Gas Turb	189,225,102	-	189,225,102	0.02177	4,119,457
15	Tot - Prod	964,839,984	(2,365,000)	962,474,984		18,775,696
16	101 - 1100	+05,860,406	(2,303,000)	706,717,304		10,770,030
17	3501	3,038,076		3,038,076	_	_
18	352	44,911,154		44,911,154	0.01600	718,578
19	353	315,351,901		315,351,901	0.01860	5,865,545
20	354	17,866,512		17,866,512	0.01480	264,424
21	355	360,038,169		360,038,169	0.03240	11,665,237
22	356	182,718,315	(128,768)	182,589,547	0.03270	5,970,678
23	357	69,763,833	(120,100)	69,763,833	0.01590	1,109,245
24	358	81,788,955		81,788,955	0.01730	1,414,949
25	359	3,235,054		3,235,054	0.01490	48,202
26	Tot - Transm	1.078,711,969	(128,768)	1,078,583,201	0.02508	27,056,859
27		,	, , ,			
28	3601	1,806,373		1,806,373	0.02340	42,269
29	361	25,327,581		25,327,581	0.01080	273,538
30	362	278,625,692		278,625,692	0.02020	5,628,239
31	363	2,443,089		2,443,089	0.03740	91,372
32	364	227,560,422		227,560,422	0.03390	7,714,298
33	3 <del>6</del> 5	125,631,343		125,631,343	0.04190	5,263,953
34	366	323,959,988		323,959, <del>9</del> 88	0.02190	7,094,724
35	367	457,123,668		457,123,668	0.04980	22,764,759
36	368	245,092,496		245,092,496	0.05200	12,744,810
37	369.1	66,273,006		66,273,006	0.05250	3,479,333
38	369.2	224,785,950		224,785,950	0.04070	9,148,788
39	370	38,906,840		38,906,840	0.02660	1,034,922
40	Tot - Distr	2,017,536,448	•	2,017,536,448	0.03731	75,281,004
41 42	T-4 T 8 D	2 000 048 447	(100.769)	9.000 110 640		102 227 062
43	Tot - T & D	3,096,248,417	(128,768)	3,096,119,649		102,337,863
44	390	69,016,874		69,016,874	0.02450	1,690,913
45	Tot - General	69,016,874		69,016,874	0.02450	1,690,913
46	Tot - General	05,010,074		03,010,07	0.02400	1,000,010
47	Sub-Total	4,130,105,275	(2,493,768)	4,127,611,507		122,804,472
48	565 1566	11100,100,270	(2,750,750)	1,121,1011,1001		,
49	3902 (King)	7,840,028		7,840,028	0.02348	184,098
50	3902 (CPP)	2,139,703		2,139,703	0.01648	35,256
51	3902 (Waterhouse)	1,517,450		1,517,450	•	
52	3902 (Hon CI)	525,251		525,251	0.07792	40,929
53	3902 (ASB)	1,463,127		1,463,127	0.08178	119,650
54	3902 (Shinco)	939,475	,	939,475		· -
55	3902 (PPP)	372,940		372,940	0.11111	41,438
56	3902 (Tenant Allowance)	14,057,907	(14,057,907)	•	-	
57	Tot- LH Impr	28,855,881	(14,057,907)	14,797,974		421,371
5 <b>8</b>			•			
59	392	61,571,155		61,571,155	0.06130	3,774,312
60		<del></del>	<u></u>	<del></del>		
61	Utility Total Deprectation	4,220,532,311	(16,551,675)	4,203,980,636	0.03009	127,000,155

		Recorded Depreciable/Amort.	Adjustments	Adjusted Depreciable/Amort.	PUC Approved	
Line No.	NARUC Account	Balance (Footnote 3)	(Footnote 1)	Balance	Accrual Rate	Annual Accrual
Cinc 140.	(a)	(b)	(c)	(d)	(e)	(f)
61	Amortizable Plant	1-7	• •	• ,		
62	316	25,605,362		25,605,362	0.05000	1,280,268
63	Tot - Steam	25,605,362	•	25,605,362	0.05000	1,280,268
64						
65	346	18,920,509		18,920,509	0.05000	946,025
66	Tot - Gas Turb	18,920,509	-	18,920,509	0.05000	946,025
67		44.505.074		44 505 024	0.0000	0.006.004
68	Tot - Prod	44,525,871	•	44,525,871	0.05000	2,226,294
69	0011	00 070 707	(14.146)	32,358,581	0.20000	6.471.716
70	3911	32,372,727	(14,146)	4,184,969	0.10000	418,497
71 72	3912 3913	4,184,969 16,654,121	•	16,654,121	0.06670	1,110,830
72 73	393	1,499,931		1,499,931	0.04000	59,997
73 74	393 394	34,936,481		34,936,481	0.04000	1.397,459
74 75	395	768,148		768,148	0.06670	51, <b>235</b>
76 ·	396	14,998		14,998	0.05560	834
77	397	128,044,936		128,044,936	0.06670	8,540,597
78	398	9,033,469		9,033,469	0.06670	602,532
79	Tot - General	227,509,780	(14,146)	227,495,634	0.08199	18,653,698
80	101 0010101		4			
81						
82						
83	Utility Total Amortization	272,035,651	(14,146)	272,021,505	0.07675	\$ 20,879,992
84						-
85	TOTAL RAM DEPRECIATION	//AMORTIZATION		l	ine 61 + Line 83	\$ 147,880,147
86	LESS: Vehicle Depreciation (A	•			Line 59	\$ (3,774,312)
87	ADD: ADIT Excess Amortization				Schedule D5	(7,121,415)
88	LESS: Depreciation & Amortiz	ation in Current Revenues			Footnote 2	\$ (128,974,585)
89	D444 4 d': -1	41 0 0				\$ 8,009,835
90	RAM Adjustment for Deprecia			Sal	nedule G Line 17	\$ (509,605)
91 92	RAM Adjustment for CIAC Am Total RAM Adjustment for Det			GLI	leddie G Lille 17	\$ 7,500,230
93	Times: Factor for Revenue Ta			S	chedule C Line 5	1.09750
94	Tilles. Factor for neveride 1a	1888		<u>.</u>	01100010 0 00	
95	RAM DEPRECIATION & AMO	BRIZATION				\$ 8,231,502
						To Sch A1
Footnote	9:					
	Amounts are recorded (in \$00	OOs), except for the		Plant in Service		
1	following adjustments (see HE			From D1		
	ERP EAM Hardware	DE 001):	HECO-WP-D2-001	\$ (14)	Linked from D1	
	Koolau-Wallupe #1 Str 30 P9	Penloce	HECO-WP-D2-001	\$ (129)		
	Tenant Improvement Allowan		TIEGO III DE COT	(14,058)		
	ARO Assets included in Depr		GL# 10100001	(2,365)		
	Total			\$ (16,566)		
2	Depreciation & Amortization in	Current Revenues*:		Depr/Amort Expense		
	Total Depreciation			\$ 139,686,000		
	LESS: Vehicle Depreciation			(3,590,000)		
	LESS: Amortization of Exc			(7,121,415)	To Line 02	
, .	Total Depreciation & Amortiza	ttion in Current Revenues		128,974,585	To Line 88	

\*See Order No. 35335, For Approval of General Rate Case and Revised Schedules/Rules, filed on March 9, 2018, in which the Commission accepted the Parties' Stipulated Settlement on Remaining Issues filed March 5, 2018, HECO T-25, Attachment 1, Page 1 and the Revised Attachment to the Parties Stipulated Settlement on Remaining Issues, filed March 8, 2018, HECO T-26, Attachment 2A, Page 1.

- 3 Per Accounting records, does not include land amounting to \$43,971,885 as of December 31, 2017.
- 4 Amount represents tenant improvement allowances paid by the lessors and excluded from the RAM calculation.

## HAWAIIAN ELECTRIC COMPANY, INC. DECOUPLING CALCULATION WORKBOOK DETERMINATION OF CHANGE IN DEFERRED INCOME TAXES

Line No.	NARUC Account	Reference	Projected ADIT Change
	(a)	(b)	(c)
1 2	State Tax Depreciation Amorti≳ation of Excess Deferreds	Schedule F1 Schedule D5	9,565,133 7,121,415
3	Subtotal		16,686,548
4	Effective Federal Tax Rate	HECO-WP-F-001	19.7368%
5	Federal Deferred Tax on State Tax Depreciation		3,293,398
6 7 8	Add back State Tax Depreciation Federal Tax Depreciation Federal/State Difference	Line 1 Schedule F1	(9,565,133) 9,565,133
9	Tax Rate on Federal Only Adjustment	HECO-WP-F-001	21%
10	Federal Deferred Tax Adjustment		-
11	Total Federal Deferred Taxes Before Proration		3,293,398
12	Proration Adjustment	HECO-WP-F1-003	(543,770)
13	Total Federal Deferred Taxes After Proration		2,749,628
	STATE DEFERRED TAXES		1
14	State Tax Depreciation	Line 1	9,565,133
15	Amortization of Excess Deferreds	Line 2	7,121,415
16	Subtotal		16,686,548
17	Effective State Tax Rate	HECO-WP-F-001	6.0150%
18	Total State Deferred Taxes		1,003,702
19	TOTAL FED AND STATE DEFERRED TAXES		3,753,330
			To Sch D1

NOTE: In accordance with the tariff, the change in ADIT in the RAM year is based on the temporary book/tax depreciation differences associated with the RAM year plant additions (major capital projects and baseline plant additions). It does not include any estimated ADIT related to the repairs deduction or CIAC on RAM year plant additions.

#### HAWAIIAN ELECTRIC COMPANY, INC. DECOUPLING CALCULATION WORKBOOK DETERMINATION OF TAX DEPRECIATION

			CO-WP-F1-00										
Line No.	LIFE	PROJECTS		TOTAL	PROJECTS P		TOTAL						
	(a)	(b)	(c)	(d)	(e)	<b>(f)</b>	(g)						
1 Computers/PV	5	674	5,880	6,754	0 35%	2.32%	2 67%						
2 Communication	20		2,816	4,527	0.58%	1 11%	1 79%						
3 Off/Furr/Tools	7		3,322	5,615	0.91%	1 31%	2.22%						
4 Distribution	20		108,034	129,856	8 63%	42 71%	51 34%						
5 Land	-	1,314	158	1,472	0.52%	0.06%	0.58%						
6 Non-Steam Production	15	2.562	-	2,562	1.01%	0.00%	1.01%						
<ol> <li>Steam Production</li> </ol>	20		3,023	25,753	8 99%	1.20%	10 18%						
8 Structure	38		513	4,359	1.53%	0.20%	1.74%						
P Transmission	、 20		10.055	24,927	5.88%	3.98%	9 66%						
10 Fransmission	15	35,424	4.682	40,306	14.01%	1.93%	15.94%						
11 Vehicles	•	•	6.769	6,76₽	0.00%	2.68%	2.68%						
12 TOTAL		107,467	145,463	252,930	42.49%	57,51%	100 00%						
				5 yr	0.35%	2.32%	2.67%						
				7 yr	0.91%	1.31%	2.22%						
				15 yr	15 02%	1.93%	16.95%						
				20 yr	24.17%	49 00%	73.17%						
				39 yr	1.53%	0.20%	1.74%						
				Land	0.52%	0.08%	0.58%			FED	FED	STATE	STATE
				Vehicles	0.00%	2.68%	2.08%		BASIS	YFI 1 DEPRIRATE	YR 1 TAX DEPR 1	YR 1 DEPRINATE	YR 1 TAX DEPR
				Total	42 49%	57.51%	100.00%		DASIS	DEFTINATE	TAX DEFE	JE-HIMIE	TANDEFR
				,			Vintage 2018	- 40% Bonus Depreciation	1				
NOTE (1)		Basis subject	to 40% bonus	depreciation	0.00%	0.00%							
			:	5 ут	0.00%	0.00%	0.00%	5 ут		52.000%	-	20.00%	
				7 γτ	0,00%	0.00%	0.00%	7 yr	-	48.574%	•	14.20%	
				15 yr	0.00%	0 00%	0.00%	15 yr .	-	43.000%		5.00%	-
				20 yr	0.00%	0.00%	0.00%	20 yr	-	42.250%	-	3.75%	-
		_		39 yr									
				Land									
				Vehicles Total	0.00%	0.00%	0.00%						
						0.0075	0.00.0						
		-80-1						- Regular Depreciation					
		Basis stojec	to regular dep	reciation	(Total leas an	nounte autojac	t to 40% boni	19]					
•				5 yr	0 35%	2.32%	2 67%	5 yr	5,723,096	20.00%	1,144,619	20.00%	1,144,610
				7 ýr	0.91%	1.31%	2.22%	7 ут	4,757,849	14.29%	679,811	14.28%	679,911
				15 yr	15 02%	1.03%	16.05%	75 yr	36,324,798	5.00%	1,810,240	5.00%	1,818,240
				20 ут	24 17%	49.00%	73.17%	20 yr	156,815,716	3.75%	5,880,589	3.75%	5,880,589
		i	- :	39 yr	1.53%	0.20%	1.74%	39 ут	3,719,080	1.177%	43.774	1.177%	43,774
					41 97%	54 77%	96.74%						
			TOT	AL ASSETS	41.97%	54.77%	96.74%						
					Net Deprecial	ble Baseline I	Plant Adds		207,340,639		9,565,133		9,565,133
					Major Capital Total Depreci				207,340,639		9,565.133 Fed Tax Deprect to Schedule F	elion '	9,565,133 St. Tax Depreciation to Schedule F
					6 (	Baseline Capi Lega: Repent Net plant add	ital Projects P deduction basis	to Net Depreciable Plant A lant Adds (rounded) HECO-WP-F1-001 pg 1 26% x 214,323,765)	252,930,000	Schedule D2	ry Special Study e	ach year.	

NOTE (1) The Tex Cut and Jobs Act removed bonus depreciation for public utility property.

NOTE (2) The numbers in columns b, c, d are rounded to the nearest thousand

NOTE (3) Totals may not add exactly due to rounding.

### HAWAIIAN ELECTRIC COMPANY, INC. DECOUPLING CALCULATION WORKBOOK TAX DEPRECIATION ON MAJOR CAPITAL PROJECTS ADDITIONS

				Estimated		
Line No.	Description		PUC Docket	In Service Date	Amount	_
	(a)	(b)	(c)	(d)	(e)	_
1	Assumed Value of 2018 Major Capital Projects Plant It	ems			<b>s</b> .	Schedule D3
غ	Assumed Value of 2018 Major Capital Projects - CIAC	nontaxable			•	Schedule G2 *
3	Assumed Value of 2018 Major Capital Projects - Total			-	\$ -	-
•	Addition value of Edito integer depitor i rejease Total				·	=
			FED	FED	STATE	STATE
			YR 1	YR 1	YR 1	YR 1
4	Tax Classification of Major Capital Project Additions	Tax Basis Distribution	DEPR RATE	TAX DEPR	DEPR RATE	TAX DEPR
5	5 yr		20.00%	-	20.00%	•
6	7 yr	-	14.29%	-	14.29%	-
7	15 yr	-	5.00%		5.00%	-
8	20 yr	-	3.75%		3.75%	-
9	39 ýr					
10	Land					
11	Vehicles					
	Total	\$		\$ .		\$
		To Sch F1		To Sch F1		To Sch F1

<sup>\*</sup> Adjustment only for non-taxable CIAC.

## HAWAIIAN ELECTRIC COMPANY, INC. DECOUPLING CALCULATION WORKBOOK CIAC SUMMARY

Line No.	Description	Reference	Unamortized CIAC	CIAC Amortization
	(a)	(b)	(c)	(d)
1	12/31/17 Beginning Balance	Schedule G1	\$ (365,481,916)	
2	ADD: Developer Advances - 12/31/17 Beginning Balance	Schedule G1	(33,883,949)	
3	12/31/17 Beginning Balance - Adjusted		(399,365,865)	
4				
5	2018 CIAC Additions:			
6	Baseline 5-Yr Average	Schedule G1	(38,472,321)	
7	Major Projects	Schedule G2	(119,285)	
8	Net Additions		(38,591,606)	
9				
10	2018 CIAC Amortization:			
11	Estimated Amortization	Schedule G3	8,818,605	\$ <u>(8,818,605)</u>
12				
13	12/31/18 Ending Balance		(429,138,866)	(8,818,605)
14				
15 、	LESS: CIAC Amortization in Current Revenues - NOTE (1)			(8,309,000)
16	<b>`</b>			
17	RAM Adjustment for CIAC Amortization			\$ (509,605)
18			4	To Sch E Line 91
19	12/31/18 Ending Balance-CIAC & Developer Advances	NOTE (2)	\$ (429,138,866)	
			To Sch D1 Line 16	

#### NOTE (1):

See Letter dated March 5, 2018, Subject: Docket No. 2016-0328, Hawaiian Electric 2017 Test Year Rate Case Parties' Stipulated Settlement on Remaining Issues, Exhibit 2E, Page 4 of 6, Line 168.

#### NOTE (2):

See Note (4) at Schedule G1.

#### HAWAIIAN ELECTRIC COMPANY, INC. DECOUPLING CALCULATION WORKBOOK BASELINE CAPITAL PROJECTS CIAC ADDITIONS

#### Source of CIAC balance and amort; December Monthly Reports (Red (non-confidential basis) with the PUC dated:

				2/21/2014	2/26/2015	2/23/2016	2/24/2017	3/1/2018
ine No.	Description			2013	2014	2015	2016	2017
101	(a)			(b)	(c)	(d)	(e)	(r)
1 2	CIAC Balance, January 1 (Dec Rpt pg. 10) Less: Non-Utility CIAC		NOTE (3)	(238,510,104)	(258,084,169)	(283,739,860)	(319,727,698) 618,464	(348,444,54 618,48
3	Adjusted CIAC Balance, January 1			(238,510,104)	(258,084,169)	(283,739,660)	(319,109,234)	(347,826,07
4	Less; CIAC Amortization (Dec Rpt. pg. 2)			5,652,912	8.147,559	6,771,148	7,597,437	8,309,48
5	CIAC Balance, December 31 (Dec Rpt. pg. 10)			258,084,169	283,739,660	319,727,698	348,444,542	386,100,38
6	Less: Non-Utility CIAC		NOTE (3)	-	-	(618,484)	(618,464)	(618,46
7	Less: Adjusted CIAC Balance, Decamber 31		- 1-7	258,084,169	283,739,660	319,109,234	347,828,078	365,481,9
8	Total Adjusted CIAC Additions	(Sum Line 3, 4 & 7)		25,226,977	31,803,060	42,140,722	36,314,281	To Sch 25,965,31
8	Add Developer Advances:		NOTE (4)	_		_		33.883.94
19	Total Adjusted CIAC & Developer Advance Adv	fitions	1401E (4)	25,226,977	31,803,050	42,140,722	36,314,281	59,849,20
		Man.	II N.					
20 21	Less Major Projects:	<u>Dki No.</u>	<u>Item No.</u>					
22	2008 in-service:							
23 24	CIP Generating Unit	05-0145	Y49000	•				
25	2010 In-service:							
2 <b>6</b> 27	K3 Biofuel Co-Firing	2009-0155	P0001577					
28	2011 In-Service:							
29	W8 Boller Controls Upgrade	2007-0365	P7650000					
30	EOTP Pn. 2 (Subs/Switch Stations)	2010-0062	Y48500	(87,994)	(43,725)	(15,232)	(716)	
31	W7 Controls Upgrade	2009-0185	P7590000					
32 33	W8 Main Transformer Replace		P0001399					
34	2012 (n-Service: 4							
35	K1 Condenser Tuba Replace	2010-0126	P0000681					
36	BPT Yank 132 Improvements	2010-0286	P0000899					
37	Mobile Radio Replacement	2010-0162	P0001595					
38 39	Kapolel Substation	2011-0026	Y00127					
40	2013 In-Service.							
<b>4</b> 1	Pukele 80MVA Tsf #3	2011-0156	P0001494					
42	Kekasko Makai-lwilei 25kV DL	2009-0042	Y00038					
43	Kalol Substation - Land - NOTE (2)	2008-0070	Y00118					
14 15	North South Road 45kV Line	2008-0070	Y00119					
46	2014 In-Service:					•		
47	Kaloi Substation	2008-0070	Y00118					
48	Katol Sub 46kV & 12kV Distr	2008-0070	Y00119					
49	Kaloi Telecomm	2006-0070	Y00119					
50	Kaloi Sub 12kV Work	2008-0070	Y00119					
51	Kakaako Makai-Kewalo 25kV DL	2009-0042	Y00038					
52	Kakasko Makel DOT Queen-Cook	2009-0042	Y00038				(2,825,023)	
53	BPT Tank 133 improvements	2010-0318	P0000900					
54	Pukele 80MVA Tel #2	2011-0156	P0001492					
55 56	DOT Airport DSG	2008-0329	P0901370					
57	2016 In-Service:							
58 59	Pukele BOMVA Tel #1	2011-0156	P0002264					
60	2017 In-Service:							
61	ERP EAM Hardwore	2014-0170	Y00168					
62 63	Total Net CIAC & Developer Advance Addition	•		25,136,983	31,759,325	42,125,490	23,488,540	59,849,2
64								

NOTE (1): The CIAC amounts of the major projects are reflected in the year that they were received. In previous Decoupling fitings these amounts were from the respective year's GO7 plant addition annual reports which reports the CIAC in the year the project closed to plant. In the past, the total CIAC additions, which reflect actual comfibutions received in the year, may not have included the total major project CIAC from the GO7 report to the extent that the CIAC was received in advance, or in multiple payments over a span of more than one year. Source:

NOTE (2): CIAC received for this project was not reflected in the 2012 and 2013 Decoupling fillings as previous fillings reported the CIAC amounts of the mejor projects from the respective year's GO7 plant addition annual report which reports the CIAC in the year the project closed to plant. See GENERAL NOTE

NOTE (3): Adjustment to remove non-utility project related CIAC from the general ledger baterce. Chapin UG Duct Line is a non-utility asset. It is a contributed asset that was given to the Company. It is not being used and there are currently no plans to use it. See Schedule G3, Line 96. Adjusted CIAC Additions for 2016 was corrected to exclude the non-utility plant belance from the beginning balance.

NOTE (4) In 2017, the Company reclassed the portion of CIAC for projects where the cash balance received was in excess of total incurred coats along the project agreements include provisions which allow for instances that unapplied funds received in advance would be subject to returns. The frue-up provision slows for any excess funds not expended to be refunded back to the developer. Furthermore, between the timing of the cash receipt to the project completion date, the project could be terminated, which would then result in refund of the unapplied funds. See below for a reconciliation of the Customer Advance balance at December 31, 2017:

The unapptied developer funds received in advance (Developer Advances) are excluded from the CIAC belance subject to amortization until they are reclassified to CIAC as costs are incurred. Developer Advances are included in the calcutation of the Last Rive-Year Average because they represent funds received in advance and are expected to be reclassified to CIAC as costs are incurred in the current year. Developer advances were also included in the Unamortized CIAC belance (See "Average Rete Base" from HECO Decision and Order No. 36280, filed 28/2018 of Docket No. 2016-0228).

### HAWAIIAN ELECTRIC COMPANY, INC. DECOUPLING CALCULATION WORKBOOK MAJOR CAPITAL PROJECT CIAC ADDITIONS

Line No.	Description	PUC Docket Reference	Estimated In Service Date	Amount
	(a)	(b)	(c)	(d)
1 .	2018 Major Project CIAC Additions by Project:			
2 3	Kakaako Makai DOT Queen-Cook Amount Qualifying for 2018 RAM	Docket No. 2009-0042 (D&O dated 8/7/2009) UI Planner Budget files	Apr-14	22,683
3 4	DOT Airport DSG Amount Qualifying for 2018 RAM	Docket No. 2008-0329 (D&O dated 6/25/2009) UI Planner Budget files	Aug-14	96,602
5	Total Major Project CIAC Additions for 2018 RAI	M (See HECO-WP-G2-001)		\$ 119,285 To Sch G & D1

### HAWAHAN ELECTRIC COMPANY, INC. DECOUPLING CALCULATION WORKBOOK CIAC AMORTIZATION

		2016	2017		2018
<u>.                                    </u>	Description (a)	Balance (b)	Amortization (c)	Balance (d)	Amortization (e)
	CIAC by Vintage:				
	1981		\$ 1,778 \$		\$ 1,77
	1982 1983	90,973 190,788	5,351 10,5 <del>9</del> 9	85,522 180,189	5,35 10,59
	1984	196,871	10,362	186,509	10,36
	1985	260,971	13,049	247,922	13,04
	1986	387,930	18,473	369,457	18,47
	1987	779,421	35,428	743,993	35.42
,	1988 1989	1,148,335 986,131	49,928 41,089	1,0 <b>98,4</b> 07 845,042	49,92 41,08
í	1990	6,563,315	222,533	5,340,782	222.53
2	1990 - Land	1,303,408	-	1,303,408	
3	1991	2,751,141	105,813	2,645,328	105,81
!	1982	2,546,132	94,301 200,637	2,451,631	84,30 200,60
5	1993 1994	5,617,820 4,162,229	143,525	5,417,183 4,018,704	143,52
,	1905	3,234,852	107,828	3,127,024	107,82
3	1995	2,546,489	82,145	2.464,344	82,14
•	1997	1,945,082	60,784	1,884,298	60,78
1	1995	2,870,243 3,240,772	86,977 95,317	2,783,266 3,145,455	86,97 95,31
,	2000	2,185,856	62,453	2,123,403	62,45
•	2001	2,786,823	76,856	2,689,967	76,85
	2002	3,929,841	106,212	3,823,629	106,21
5	2003	4,273,673	112,465	4,161,208	112,44
9 7	2004	2,978,655	76,376 248,436	2,902,279 9,689,023	76,31 248,41
9	2005 2006	9,937,459 8,564,572	208,892	8,355,680	208,8
j	2007	9,115,073	217.026	6,898,047	217,0
3	2008	8,406,563	185,502	8,211,061	195,5
1	2009	6,796,031	154,523	6,644,508	154,5
2	2010 2011	12,738,190 15,395,712	263,026 356,429	12,453,164 16,039,263	283,0 356,4
ì	2012	32,272,512	586,649	31,585,863	686,6
5	2013	21,257,646	442,868	20,814,580	442,8
5	2014	26,550,784	603,261	28.956.533	603,2
7	2015	39,094,900	781,898	38,313,002 16,352,501	781,8
3	2016 2017	16,679,551	327,050	15,148,435	327,0 297,0
5	2011			10,140.400	22.10
1					
2	CIAC GET Adjustment:				
3	-edj 92-96 GET	(121,650)	(3,824)	(117,726) (43,479)	(3,9. (1,4
4 5	-ad) 97 GET -adi 98 GET	(44,882) (58,010)	(1,403) (1,697)	(54,313)	(1,5
	-ad) 99 GET	(73,753)	(2,169)	(71,584)	(2.1
7	-adj 00 GET	(71,003)	(2,029)	(68,974)	(2.0
•	-adj01GET	(105,850)	(2,540)	(102,910)	(2.8
₽	-adi 02 GET	(115,095)	(3,111)	(111,984)	(3,1 (4,1
D 1	-adj 03 GET -adj 04 GET	(158,655) (109,612)	(4,122) (2,611)	(152,533) (106,801)	(2,8
2	-adj 05 GET	(225,439)	(5,636)	(219,803)	(5,6
3	-adj 96 GET	(494,451)	(12,060)	(482,391)	(12,0
4	-adj 07 GET	(398,617)	(9,496)	(389.321)	(9,4
5	-adj 08 GET	(326,629)	(7,596)	(319,033)	(7,5
6 7	-adj 09 GET -adj 10 GET	(304,145) (458,801)	(6,912) (10,196)	(297,233) (448,605)	(5, <b>9</b> (10,1
	-adj 11 GET	(395,931)	(8,607)	(387,324)	(8,6
9	-adj 12 GET	(498,140)	(10,599)	(487,541)	(10,5
0	-ed₁13 GET	(658,224)	(13,713)	(644,511)	(13,7
1 2	-adj 14 GET -adj 15 GET	(673,829) (934,177)	(13,752) (18,684)	(650,077) (915,493)	(13,7 (18,6
3	-adi 16 GET	(862,287)	(16,808)	(845,379)	(16,9
4	-adj 17 GET	(,,	,	(1,104,366)	(21,6
5					
6	1 1/ 10/10				
7 8	In - Kind CIAC. 1968	317,549	13,806	303,743	13,8
8	1989	380,041	15,002	345,039	15,0
0	1990	188,102	7,524	180,578	7,5
1	1991	404,676	16,565	389,111	15,5
2	1992	1,144,268	42,380 25,138	1,101,888	42,3 35,1
3 4	1993 1994	983,850 1,654,957	35,138 57,068	948,712 1,597,889	35,1 67.0
5	1995	3,336,158	111,205	3,224,953	111,2
6	1996	1,740,814	56,155	1,684,659	66.1
7	1997	911,043	28,470	982,573	28.4
8	1998	1,765,877	53,511	1,712,366	53,5
<b>9</b> D	1999 2000	1,399,062 2,892,247	41,149 82,636	1,357,813 2,809,611	41,1 82,6
ı	2001	1.205,455	33,485	1,171,970	33,4
2	2002	2,645,440	71,498	2,573,942	71.4
3	2003	4,018,794	105,758	3,913,036	105,7
4	2004	2,472,693	63,402	2,409,291	63,4
5 6	2005	4,229.425 3.708.854	105,738 92,655	4,123,689 3,705,199	105,7 92,6
6 7	2006 2007	3,798,854 7,523,554	92,665 179,132	7,344,422	⊌2,6 179,1
, B	2008	1,725,754	26,180	1,099,674	26,1
9	2009	2,076,398	47,191	2,029,207	47.1
0	2010	4,652,644	103,392	4,549,252	103,3
1	2011	4,986.329	108,398	4,877,931	108,3
2	2012	3,808,013	81,022 65,494	3,725,991 3,078,220	81,0 65,4
	2013 2014	3,149,714 1,669,908	65,494 34,080	1,635,828	34,0
3	2015	3,153,710	63,074	3,090,635	63.0
3 4 5					
4	2015 - Chapin UG Conduit (non-utility)	618,464		618,464	-
4 5 6 7	2015 - Chapin UG Conduit (non-utility) 2016		401,902	20,095,116	
4 5 6	2015 - Chapin UG Conduit (non-utility)	618,464	401,902		401,9 233,7

# HAWAIIAN ELECTRIC COMPANY, INC. DECOUPLING CALCULATION WORKBOOK EARNINGS SHARING CALCULATIONS All Amounts \$000 (Except %)

Line				_			Basis Return o		
No.		Refere	nce	Ope	rating Income (c)	_	Rate Base (d)	<u>Ra</u>	te of Return (e)
1	(a)  Reported Operating Income before ratemaking adjustment	(b) Dec 2017 Mo. PUC 3/1/18 & HECO-WP		5	116,798	\$	1,976.842		(6)
2	Retemaking Adjustments to Line 1:								
2a 2b 2c 2d 2e 21	Incertive Compensation Expenses (net of tax) Discretionary and Other Expenses Not Recoverable (net of tax) Amortization of investment income differential Income tax on Items to be replaced by synchronized interest Remove Accrued Earnings Sharing Refund (net of tax) Special Medical Needs Program Discount (net of tax)	HECO-WP-H-002 HECO-WP-H-003 HECO-WP-H-003 HECO-WP-H-005 HECO-WP-H-006			2,982 842 185 (17,165) 9 40				<del>-</del> .
3	Ratemaking Basis Amounts - Post Tax	Sum Lines 1 & 2		\$	103,691	\$	1,976,942		
4	Retemeking Capitalization		Balances		Retios		Cost Rate	We	lighted Cost
5 6 7 8 9 10	Short-Term Debt (12 mo. Avg) Long-Term Debt (Simple Avg) Hybrid Securities (Simple Avg) Preferred Stock (Simple Avg) Common Equity (Simple Avg) Total Capitalization Line 3 Rate Base Amount	HECO-WP-H-004_5	881,917 28,651 21,137 1,269,813		1.04% 39.64% 1.29% 0.95% 57.08%	\$	0.98% 5.13% 7.19% 5.37% 9.50%		0.01% 2.03% 0.09% 0.05% 5.42% 7.60%
12	Weighted Cost of Debt (Sum Lines 5-7)						2.13%		
13 13a	Synchronized Interest Expense Income Tax Factor (Note 1) Synchronized Interest Expense, net of tax					\$	42,107 1.636929121 25,723		
14	Post Tax Income Available for Preferred & Common (Line 9 - Line	e 13a)						\$	77,968
17	Less: Preferred Income Requirement (Line 8 Weighted Cost time	•							988
	•	5 ( 1410 2450)						<u> </u>	76,980
18	Income Available for Common Stock							•	
19	Ratemaking Equity Investment (Line 9 Ratio times Rate Base)								1,128,319
20	Return on Equity for Decoupling Earnings Sharing (Line 18/Line 1	9)						_	6.82%
21	Earnings Shanng Revenue Credits;		Basis Points						
22 23 24	Achieved ROE (basis points) Authorized Return (basis points) ROE for sharing (basis points)	. –	682 950						
25	Sharing Grid per RAM Provision		First 100 bp	N	lext 200 bp	A	l over 300 bp	Rate	payer Total
26	Distribution of Excess ROE (basis points)		0		0		0		
27	Ratepayer Share of Excess Earnings	_	25%		50%	_	90%		
28	Ratepayer Earnings Share - Basis Points		-		-	•	• -		-
29	Revenue Credit per Basis Point (Note 2)							<u>s</u>	203
30	Earnings Sharing Revenue Credits (thousands)							To	0 Sch A Line 5
Footnote 1	is:  Composite Federal & State Income Tax Rate Income Tax Factor (1/1-tax rate)				38.91% 1.636929121				
. 2	Ratemaking Equity Investment (line 19) Basis Point = 1/100 of a percent Eemings Required per Basis Point (thousands) Times: Income Tax Conversion Factor Pretax Income Required per Basis Point (thousands) Times: Revenue Tax Conversion Factor Revenue Requirement per Basis Point (thousands)			\$ 5 5	1,128,319 0.01% 112.83 1.636929121 185 1.0975 203				

## HAWAIIAN ELECTRIC COMPANY, INC. DECOUPLING CALCULATION WORKBOOK PUC-ORDERED ADJUSTMENTS

Line				
No.	Description	Reference		
	(a)	(b)	(c)	(d)

This Schedule has not been developed yet and will be developed only when/as needed.

### HAWAIIAN ELECTRIC COMPANY, INC. DECOUPLING CALCULATION WORKBOOK DETERMINATION OF RAM CAP

Line No.	Description	Reference	Amount \$000
	(a)	(b)	(c)
1	Last Rate Order Target Annual Revenues	Schedule B1	599,974
2	Revenue Tax Factor (1/(1-8.885%))		1.0975
3	Last Rate Order Target Annual Revenues plus Revenue Taxes	Line 1 x 2	658,472
4	2018 GDP Price Index	HECO-WP-C-002	2.10%
5	2018 RAM Cap Increase excluding Exceptional & Other Matters	Line 3 x 4	13,828
_			
6	RAM Cap for 2018 RAM Revenue Adjustment, Adjusted	Line 5	13,828
			To Sch A1

#### Note 1 Target Revenues:

See Decision and Order No. 32735, filed March 31, 2015, paragraph 107, page 94:

"The RAM Cap shall be based on the Target Revenues determined in accordance with the RBA and RAM tariffs as provided below ("Basis"), times the cumulative annually compounded increase(s) in GDPPI for intervening years, adjusted to include applicable revenue taxes."

Continued in Decision and Order No. 32735, filed March 31, 2015, paragraph 109, page 96:

"Following the issuance of a final decision and order in a rate case, the Basis for the calculation of the RAM Cap shall be the target revenues determined in accordance with the RBA tariff based on the results of the Company's most recent final rate case decision." The Company requests that the 2018 RAM Cap be based on 2017 target revenues established as a result of Interim Decision and Order No. 35100 in Hawaiian Electric's 2017 test year rate case and requests to propose a change to replace "most recent final rate case decision".

### HAWAIIAN ELECTRIC COMPANY, INC. DECOUPLING CALCULATION WORKBOOK EXCEPTIONAL & OTHER MATTERS

Line No.	Description	Reference	Amount \$000
	(a)	(b)	(c)
1	None		
2	2018 Revenue Adjustment for Exceptional & Other Matters		\$ - To Sch A1

#### Note 1 Exceptional and Other Matters:

See Order No. 32735, filed March 31, 2015, paragraph 107, page 94 - 95:

"The Basis used in determining the RAM Cap shall be adjusted to exclude or otherwise appropriately account for adjustments for the recovery of revenues for previously explicitly stipulated and approved exceptional matters or other matters specifically ordered by the commission, which shall, in any event, be recovered fully without respect to any limitations resulting from application of the RAM Cap."

Footnote 149 stipulates that such applicable matters include adjustments accounting for CT-1 costs (for Hawaiian Electric) and CIS costs (for all of the Hawaiian Electric Companies) as provided in a stipulated agreement approved by the Commission as amended in Order No. 31126 in Docket No. 2008-0083.

See Order No. 35335, For Approval of General Rate Case and Revised Schedules/Rules, filed on March 9, 2018, in which the Commission accepted the Parties' Stipulated Settlement on Remaining Issues filed March 5, 2018, Exhibit 2C, Page 6 of 13.

The HECO 2017 Test Year Rate Base included CIP CT-1 as a regulatory asset and CIS deferred costs in Unamortized System Development Costs. Accordingly, inclusion of CIP CT-1 and CIS costs as Exceptional & Other Matters is not applicable for the 2018 Annual Decoupling filing.

Attachment 2 Trans. Nos. 18-01, 18-02, and 18-03 PAGE 1 OF 5

> INFORMAL CA-IR-17 2018 RBA RATE FILING

#### **INFORMAL CA-IR-17**

Transmittal 18-03 at page 17 describes an agreement to address MECO's Tax Act impacts within its pending rate case and as "Exogenous Tax Changes with decoupling RAM rate calculations submitted and reviewed for implementation on June 1, 2018." To determine the amount of this change, old rate case data is employed that is described as, "Exhibit 2 of this Transmittal provides the results of operations for the Maui Electric 2012 test year recalculated according to the reduction in the corporate income tax rate from 35% to 21% and the exclusion of the domestic production activities deduction ("DPAD"), as set forth in the Tax Act" which amounts are then compared to Exhibit 2012 test year calculations approved by the Commission without Tax Act impacts. MECO then proposes to include 151/365 days of the \$5.9 million difference or \$2.44 million as an Exogenous Tax Change reduction to the RAM. Please respond to the following:

- a. Explain the rationale for the proposed approach, rather than reliance upon more current test year information.
- b. Confirm that target revenues have been increased multiple times through RAM adjustments subsequent to the 2012 test year and explain why these increases in allowed return on rate base should not be allowed to impact the Exogenous Tax Changes" amount.
- c. Explain each reason why multiplication of the weighted cost of Preferred and Common Equity on Schedule D to Average Rate Base on line 24 of Schedule D1 of MECO's 2017 RAM calculation to determine post-tax income would not be a more reasonable basis to determine pretax income subject to the change in income tax rates than MECO's proposed reliance upon 2012 test year calculations for this purpose.
- d. Provide complete copies of all reports, analyses, workpapers and other documents associated with or supportive of your response to part (c).

#### Hawaiian Electric Companies' Response:

a. Maui Electric's 2012 test year rate case is the most recent fully litigated case. In Maui Electric's 2018 test year rate case (Docket No. 2017-0150), the Parties are still in discovery and an interim decision and order is expected in August 2018. In order to provide Maui Electric customers the opportunity to benefit from the Tax Cut and Jobs Act ("Tax Act") on June 1, 2018, the Company calculated the exogenous tax change based on the most recently approved test year revenue requirements, which underlie the currently effective base rates being paid by customers. As the 2018 test year revenue requirement is still

being litigated and subject to change, the last approved revenue requirement was deemed reasonable. Further, use of the approved 2012 test year revenue requirement calculations allows for transparency in easily tracing through the corporate income tax rate change and exclusion of domestic production activities deduction ("DPAD").

Yes. Target revenues have reflected RAM adjustments in the years subsequent to the 2012 b. test year as illustrated in Schedule B1. The annual increases in the RAM adjustment in each decoupling filing, which include the allowed return on rate base, are effective from June 1 of the filing year through May 31 of the following year. Thus, any annual RAM adjustments in years subsequent to the 2012 test year, but prior to the implementation of the lower corporate tax rates in the Tax Act on January 1, 2018, would not impact the Exogenous Tax Change, as they were not subject to the lower tax rates. Included in the RAM adjustment in Schedule B1 of Attachment 2, line 13 is \$7.4 million in rate base return on investment which is the return on the change in rate base from the 2012 test year to the estimated 2018 rate base (Attachment 2, Schedule D). This rate base return on investment is cumulative from 2012 test year and comprises all annual allowed return on rate base previously reflected in past RAM adjustments. This is illustrated in Attachment 1 to this response. As the rate base return on investment in the current decoupling filing is cumulative from the 2012 test year through the estimated 2018 rate base, the reduction in return on rate base from the prior RAM adjustments due to the Tax Act is not included in the Exogenous Tax Change, but in the current RAM adjustment.

Attachment 2 Trans. Nos. 18-01, 18-02, and 18-03 PAGE 3 OF 5

> INFORMAL CA-IR-17 2018 RBA RATE FILING

The Company's Exogenous Tax Change of \$5,907,000 is determined based on the c. approved 2012 test year revenue requirement. In effect, the \$5.9 million represents the reduction in the return on the approved 2012 test year average rate base due to the lower corporate income tax rate, which is embedded within currently effective base rates. In addition, the 2018 Rate Base RAM - Return on Investment on the estimated average rate base change from 2012 test year to 2018 in Schedule D is lower by approximately \$1.2 million 1 (Attachment 1 to this response, column G2, line 5), as a result of the lower corporate income tax rates impacting the weighted cost of Preferred and Common Equity on Schedule D. The total impact of the Tax Act reflected in the Decoupling Filing for 2018 is approximately \$7.1 million (Attachment 1 to this response, column G2, Line 7). Put another way, the \$1.2 million reduction described above captures the lower return on investment on the cumulative change in rate base from 2012 test year through 2018. Approximately \$786,000 (Attachment 1 to this response, column F2, Line 5) is attributable to the change from 2012 test year through 2017 rate base, with the remaining \$439,000 (Attachment 1 to this response, column G1, Line 5) due to the change in 2018 rate base. In aggregate the Exogenous Tax Change based on the approved 2012 test year rate base and lower return on investment on the change from 2012 test year through 2018 in rate base

The Company acknowledges that the \$439,000 reduction in the return on investment on the 2018 incremental rate base increase is not a benefit to customers as there is no difference in the 2018 pretax rate of return due to the new lower corporate income tax rates being effective January 1, 2018. This amount, as well as the cumulative change of \$1,224,000, is included for <u>illustrative purposes only</u> to highlight that the rate base return on investment in the 2018 decoupling filing is cumulative from 2012 and includes the annual allowed return on rate base previously reflected in past RAM adjustments.

Attachment 2 Trans. Nos. 18-01, 18-02, and 18-03 PAGE 4 OF 5

> INFORMAL CA-IR-17 2018 RBA RATE FILING

reasonably approximate the benefits deriving from the lower weighted average cost of preferred and common equity due to the lower corporate income tax rate.

This method is more straightforward than the method suggested in the question in part c of this information request. Part c says to multiply the weighted cost of preferred and common equity on Schedule D to average rate base on line 24 of Schedule D1 of MECO's 2017 RAM calculation (i.e., the average rate base in the in the 2017 RAM period) to determine the post-tax income, upon which the difference in the income tax factor due to the change in tax rates would presumably be applied. Part c does not specify what would be done with this result. If it is subtracted from the 2018 RAM Revenue Adjustment, the impact of the change in the corporate income tax rate for plant added from 2013 through 2017 would be counted twice and would therefore be incorrect. The 2018 RAM Revenue Adjustment already calculates the return on investment at the lower corporate income tax rate on a cumulative basis for the plant added from 2013 through 2018. The method in part c appears to presume that the 2018 Rate Base RAM only calculates the return on investment for plant additions in 2018, which would be in error.

d. Please see Attachment 1 to this response.

#### Illustration of Change in Return on Investment

		Reference	Base Rate Base	Per	2013 Fiting	Per	2014 Filing	Per 2	015 Filing	Per 20	16 Filmg		Per 2017 Films			Per 2018 Filin	ia
Line No.		•	2012 Average	2013 Average	Annual 2013 RB Change	2014 Average	Annual 2014 RB Change	2015 Average	Annual 2015 RB Change	2016 Average	2015 RB Change	2017 Average	PR Change	Cumulative 2017 RB Change	2018		Custolelase
1	RATE BASE/CHANGE IN RATE BASE (\$000)	Sch D1	<b>A</b> 393,401	<i>B</i> 406,908	<i>B1=8-A</i> 13,507	C 435,142	C1=C-B 28,234	D 451,944	D1=D-C 16,802	<i>E</i> 445,801	E1=E-D (6,143)	<i>F</i> 440,811	<i>F1=F-E</i> (4,990)	FZ=F-A 47,410	G 467,288	G1=G-F 26,477	G2=G-A 73,887
2	CHANGE IN PRETAX RATE OF RETURN	Line 11			-1.51%		-1.51%		-1.51%		-1 51%		-1.51%	-1.51%		-1.51%	-1.51%
3 = 1 x 2	PRETAX RETURN REQUIREMENT				(204)		(426)		(254)		93		75	(716)		(400)	(1,116)
4	REVENUE TAX FACTOR (1/(1-8.885%))				1.0975		1 0975		1 0975		1.0975		1.0975	1.0975		1.0975	1 0975
5 = 3 x 4	RATE BASE RAM - RETURN ON INVESTMENT \$000				(224) <sub>(1</sub>	J	(468) n	,	(278) (1)	ı	102 (1	)	83	(788)		(439)	
6	Exogeneous Tex Change	Transmitted	8-03, Exhibit 1,	pagu 1									נח			m)	(5,907)
7=5+8	Total tax change				•												(7,131)
6 9 10 11= 9 - 10	CHANGE IN PRETAX RATE OF RETURN 2016 Decoupling Fiting, Sch D, Line 9 2017 Decoupling Fiting, Sch D, Line 9 O Change in Pretax rate of return	9,15% 10.56% -1 51%			nual RB Change Σ s 2018 RB Change Difference		(1,224) (1,224)										

<sup>&</sup>lt;sup>1</sup> The Company acknowledges that the \$439,000 reduction in the return on investment on the 2018 incremental rate base increase is not a benefit to customers as there is no difference in the 2018 prefax rate of return due to the new lower corporate income tax rates being effective January 1, 2018. This amount, as well as the cumulative change of \$1,224,000, is included fortunarrative autorities only to highlight that the rate base return on investment in the 2018 decoupling filing is cumulative from 2012 and includes the annual allowed return on rate base previously reflected in past RAM adjustments.

#### **CERTIFICATE OF SERVICE**

ADVOCACY'S STATEMENT OF POSITION was duly served upon the following parties, by personal service, hand delivery, and/or U.S. mail, postage prepaid, and properly addressed pursuant to HAR § 6-61-21(d).

DEAN K. MATSUURA MANAGER, REGULATORY RATE PROCEEDINGS HAWAIIAN ELECTRIC COMPANY, INC. P. O. Box 2750 Honolulu, Hawaii 96840-0001 1 copy by hand delivery

DATED: Honolulu, Hawaii, May 11, 2018.